OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro GAMER

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ROCKET KNIGHT ADVENTURES

THE ULTIMATE GUIDE TO KONAMI'S MEGA MARSUPIAL

THE HISTORY OF GABRIEL KNIGHT

JANE JENSEN REVISITS HER CLASSIC ADVENTURE SERIES

PLAYING WITH SUPER POWER

MODE 7 • SUPER FX • S-SMP • 65C816

SNES LUMINARIES REVEAL HOW THEY UNLEASHED THE POTENTIAL OF NINTENDO'S 16-BIT CONSOLE

ALSO INSIDE

- Screamer
- Neo Geo CD
- Panzer Paladin
- Burning Rangers
- Pinball Fantasies
- Intelligent Games

THE MAKING OF KNIGHT TYME

DAVID JONES TAKES US BEHIND THE SCENES OF HIS POPULAR SEQUEL

LET'S GET PHYSICAL!

WE SPEAK TO THE PUBLISHERS RE-RELEASING CLASSIC GAMES

LURE OF THE TEMPTRESS

CHARLES CECIL ON REVOLUTION'S DEBUT POINT-AND-CLICK HIT

BRIAN LARA CRICKET

DISCOVER HOW AUDIOGENIC HIT ITS FRANCHISE FOR SIX

XBOX GEMS
EXCLUSIVES TO INVEST IN

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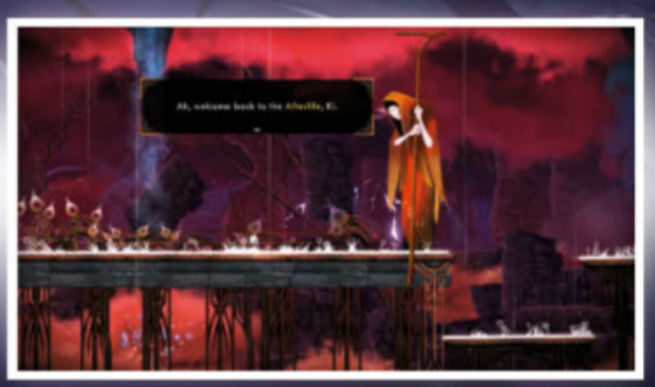
Evergate



Unleash extraordinary powers and dive into the touching story of two kindred spirits in this unique 2D puzzle-platformer

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THE RETROBATES

WHAT'S THE MOST TECHNICALLY IMPRESSIVE SNES GAME?

DARRAN JONES

Super Castlevania IV uses Mode 7 to great effect, and it has a soundtrack that seemed impossible on any other system.

Expertise:
Juggling a gorgeous wife, two beautiful girls, one SNES-loving cousin and an award-winning magazine, all under one roof!

Currently playing:
Yakuza 0

Favourite game of all time:
Strider

DREW SLEEP

Whenever my older brother would play *Starwing* I'd run over and watch in awe. Actual 3D in a game! To my young four-year-old eyes it looked as good as *Toy Story*.

Expertise:
Spamming Taizo Hori sprites in the **RG** Slack channel

Currently playing:
Final Fantasy XIV

Favourite game of all time:
Final Fantasy VIII

NICK THORPE

The one that always gets me is *Contra III* – the way Konami faked two rotating layers was just one of many incredibly clever touches.

Expertise:
Owning five Master Systems and a Mark III

Currently playing:
Tony Hawk's Pro Skater 2

Favourite game of all time:
Sonic The Hedgehog

ANDY SALTER

The only SNES games I remember playing for any extended amount of time was the original *Street Fighter II* and *Kevin Keegan's Player Manager*. However, the game that impressed me the most was *Super Mario Kart*, mainly because I don't usually like racers but I enjoyed this one.

Expertise:
Modding games, no 'vanilla' versions for me, thanks!

Currently playing:
Mount and Blade II: Bannerlord

Favourite game of all time:
Rome: Total War

DAVID CROOKES

Super Mario World 2: Yoshi's Island made great use of the Super FX 2 chip and brought a fresh dimension to those gorgeous 2D graphics.

Expertise:
Amstrad, Lynx, adventures, *Dizzy*, and PlayStation (but is it retro? Debate!)

Currently playing:
The Last of Us Part II

Favourite game of all time:
Broken Sword

PAUL DRURY

The beautiful, swirling Mode 7 stuff in *Pilotwings* made me believe I could fly, which, given my ample frame, is technically impressive.

Expertise:
Domino fall world records

Currently playing:
The Rocky Horror Show (C64)

Favourite game of all time:
Sheep In Space

IAIN LEE

Super Mario Kart – I'm always amazed at how beautiful and clever it is, and it looks amazing on the SNES.

Expertise:
Buying overpriced stuff on eBay then never touching it

Currently playing:
Fall Guys – the boys have just won their first game and the house has gone nuts!

Favourite game of all time:
Elite (BBC Model B)

PAUL WALKER-EMIG

For me it's hard to look beyond *Donkey Kong Country*. When I first saw it, I was blown away by a visual style that was way beyond what I had thought was possible at that time. If you compare it to other early attempts at 3D art styles from around that time, I think it holds up pretty well, even all these years later.

Expertise:
Professional Gabriel Knight lookalike

Currently playing:
Heaven's Vault

Favourite game of all time:
Metal Gear Solid

RORY MILNE

I'll say *Star Fox* – or *Starwing*, as I remember it. Its polygon graphics seemed like a tantalising glimpse of the future, and they gave the game an almost cinematic quality.

Expertise:
The game that I'm writing about at the time of writing

Currently playing:
Fire & Ice

Favourite game of all time:
Tempest

I loved my Mega Drive, but the SNES made me cheat on it. Back in the day, consoles were expensive and money was hard to come by, so many of my friends had a single games machine, and I was no exception. I loved Sega's Mega Drive, but when I saw those early screenshots of *Super Mario World* and *F-Zero*, I knew that I also needed to own Nintendo's console somehow. I wouldn't actually get a machine until late 1991 and the system I plumped for was the US version, mainly because there were no Super Famicoms in stock at the Video Game Centre.

I traded in my Mega Drive and countless games in order to get my hands on a brand-spanking-new SNES and about six games, including *Super Mario World*, *F-Zero*, *Pilotwings*, *Legend Of The Mystical Ninja* and *A Link To The Past*. I was not disappointed with my purchase at all. Nintendo's machine felt exceptionally capable, and while it clearly struggled with a lot of shmups (*Super R-Type* immediately springs to mind), it felt like a sizeable step up over Sega's console. The affair wouldn't last, of course. I went back to Sega's machine and then flip-flopped between both until the next gen came out, but I'll never forget how games like *Star Fox*, *Super Castlevania IV* and *Pilotwings* constantly blew me away.

This month's feature celebrates the actual hardware that made Nintendo's machine such a great console, and hopefully the featured developers will offer an interesting peek behind the curtain and reveal why the SNES remains such a beloved system.

Stay safe and enjoy the magazine!

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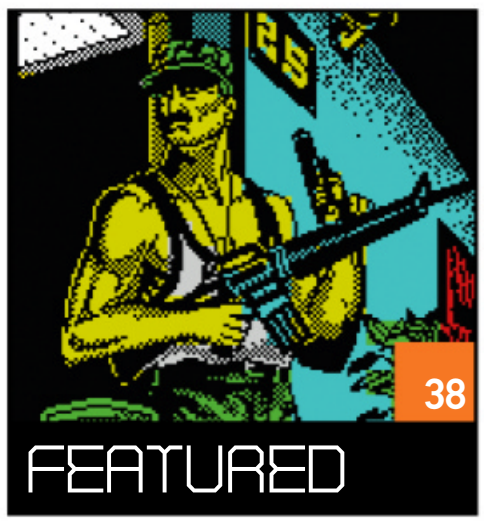

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David Jones revisits the third game in his *Magic Knight* series

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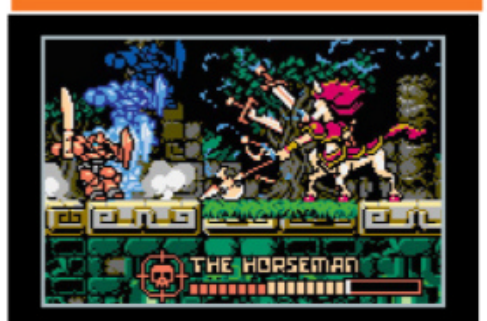

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Jane Jensen talks through the highs and lows of her popular point-and-click adventures

retro radar

GIVE US TWO MINUTES AND WE'LL GIVE YOU THE RETRO WORLD

» [N64] The discovery of Luigi's intended *Super Mario 64* character model sent fans into a frenzy.

SOMEONE CALL A PLUMBER

Massive file leak exposes Nintendo development secrets

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Tantalising Nintendo secrets have spilled forth from a major leak

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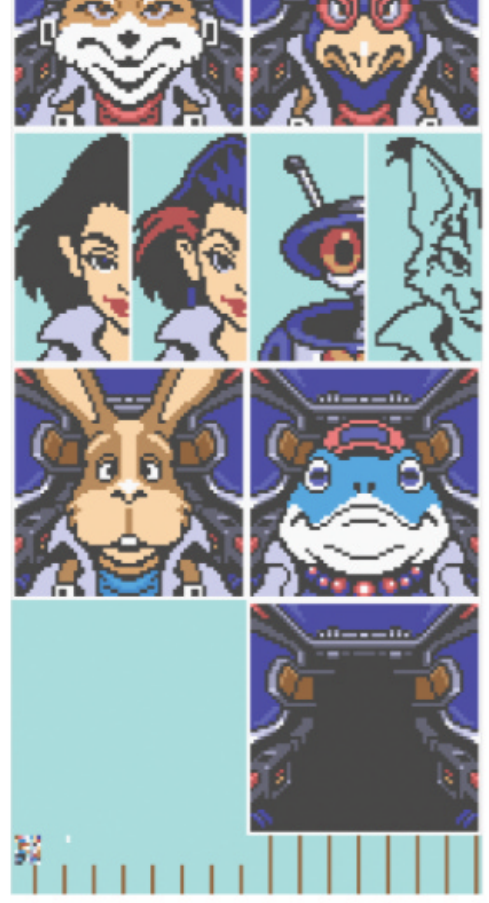
14 BACK TO THE NOUGHTIES
It's October 2003 and Nick has taken a tumble through the time vortex to bring you the 'latest' news

The internet has recently seen a number of fascinating revelations about classic Nintendo games dating back over three decades, as source code was leaked for games including the likes of *Pilotwings*, *Super Mario World*, *Yoshi's Island*, *Star Fox 2*, *Super Mario 64* and *The Legend Of Zelda: Ocarina Of Time*. However, the discoveries have been tainted by the fact that all of the data used to make them was obtained illegally.

While source code and prototype games have often leaked to the public contrary to the wishes of their publishers, these incidents have typically involved people who were given legitimate access to them at some point. There have been incidents where source code has been used as padding on a game disc, or prototype games have been found in the possessions of a developer following a home clearance. What makes this incident different is that the files in this leak were obtained via illegally accessing a private server – hacking, essentially.

This isn't the first time that such an incident has occurred, but it is arguably the most intriguing due to the fact that it involves Nintendo. The company has always been keen to keep a strong degree of control over the presentation of its products, and it has often been quite secretive over its products in development. Occasional details have been divulged and alluded to in the past, including in Nintendo's *Iwata Asks* series and interviews with **Retro Gamer**, or in prototype builds of games shown to the press and public at events like Space World and E3. But many of the discoveries are brand new,

» [SNES] The prototype labelled 'super_donkey' is a fascinating look at an embryonic platform game concept.



» It's fascinating to see how games evolved – who'd have guessed *Star Fox 2* could have featured humans?

» These early *Super Mario Kart* experiments were referenced in issue 167's feature on the game.

and give some amazing insights into Nintendo's creative process.

Source code was found for a number of games, along with unused graphics, uncompressed audio and more. For example, the files found for *Pilotwings* contained graphics from when it was known as a more combat-focused flight simulator known as *Dragonfly*. A variety of early designs for Yoshi were found in the *Super Mario World* graphics data, showing how the character evolved from the long-limbed steed of Shigeru Miyamoto's original sketch into the cuter, stubbier form we know today. A variety of early sprites were also unearthed for *Super Mario Kart*, dating back to the earliest prototype efforts. These include a chap in a racing suit and helmet, riding an *F-Zero* style hovercraft and a kart – designs mentioned by Hideki Konno in our feature *The Making Of Super Mario Kart*, way back in issue 167.

Later SNES games with fascinating lost content include *Yoshi's Island*, which lost a minigame in which Yoshi uses his helicopter transformation to bomb huts, and *Star Fox 2*, which had a human pilot concept at one point in development. N64 fans haven't been left out, either. Fans of *Super Mario 64* were fascinated to see remnants of the game's earliest showings, including stages that were seen in press previews. However, the biggest deal was the discovery of a 3D model for Luigi – some comfort for players who had fallen for internet rumours back in the day. Icons for unused *Mario Kart 64* items such as the feather and Yoshi egg have been found too, and fans have already reconstructed a prototype dungeon seen in early screenshots of *The Legend Of Zelda: Ocarina Of Time*, as well as various scrapped enemies.

» [N64] Enterprising modders are already putting these discoveries to work in their own ROM hacks.

Possibly the most interesting things concern the projects that never came to be. In the past, Nintendo developers have spoken of an attempt to remake *Zelda II: The Adventure Of Link* in 3D, and Argonaut's developers confirmed that they were working on a 3D Yoshi platformer. 3D models of Link and Yoshi have been found that would have been used for the SNES Super FX chip, representing the only remnants we have of those projects. Another project identified as 'super_donkey' is a platform game featuring a multi-sprite character similar in style to *Rayman*, and seemingly has ties to *Yoshi's Island*.

As well as data for games, plenty of other things were made public as a result of the hack. Development tools that had been dormant for decades were suddenly thrust into the public spotlight, with the appearance of a *Star Fox* CAD tool prompting its author Dylan Cuthbert to post on Twitter, wondering, "Where the hell have hackers got all this obscure data from?" The leak also contains internal communications from Argonaut involving named individuals, which is a testing issue for those who draw an ethical distinction between issues of corporate and personal privacy.

The long-term repercussions of this leak are unclear. This material is in the wild now, and any attempt to suppress it would undoubtedly fail. But while it's unlikely that Nintendo will become any more secretive than it already is, the company is notoriously litigious. If it can trace the people involved in the leak, they could expect to face some major legal difficulties. Regardless of whether or not that happens, it's now possible to get a much deeper understanding of some of the best videogames ever made.

» [SNES] We're not entirely sure bombing a village would have been a great look for Yoshi.

INTRUDER ALERT

Other famous hacks from gaming history

2003 HALF-LIFE 2 LEAK

Valve suffered a huge blow when the source code for its highly anticipated – and highly delayed – first-person shooter sequel was leaked on 2 October 2003. Though the game had recently been delayed until the 2003 holiday season, the truth was that the game was still over a year away from launch, and the leak revealed just how unfinished it was. The hack was the work of German gaming enthusiast Axel Gembe, who was arrested in May 2004 after admitting the crime to Gabe Newell with the hope of securing a job at Valve. He was eventually sentenced to just two years of probation.

2011 PLAYSTATION NETWORK HACK

Between 17 and 19 April 2011, hackers stole information and gained access to up to 77 million PlayStation Network accounts in one of the world's biggest ever data breaches. The data stolen included unencrypted personal information, hashed passwords and encrypted credit card details. Sony took the network offline on 20 April and kept it on ice for 23 days, meaning that PS3 and PSP owners could not play online or download digitally purchased games. Sony estimated the cost of the outage at $171 million – not including a £250,000 fine issued by the Information Commissioner's Office in 2013, for breaching the Data Protection Act 1998.

» You're probably going to need to import if you fancy running a virtual bullet train from Tokyo to Osaka.

TAITO ON THE GO

Another manufacturer has joined the plug-and-play console ranks, and it's the legendary Taito. However, don't start getting excited about *Space Invaders*, *Bubble Bobble* and *Elevator Action*, because this is a dedicated *Densha De Go!* console. While these train-driving games have never caught on over here, they have always had a cult following in Japan – one that the Square Enix subsidiary hopes to capitalise on with its authentic train control panel. Don't expect to see this one in your local stores any time soon, but it's scheduled to hit Japanese shelves in December 2020. Enthusiastic importers can pick it up for ¥14,800 (£107).

MOUSE MAN PASSES

William English, co-creator of the computer mouse, passed away at the age of 91 on 26 July. Based on conceptual notes provided by his Stanford Research Institute colleague Doug Engelbart, William created the first mouse prototype in 1963, consisting of a wooden block with a single button and two wheels to track movement. The concept was demonstrated to the public in 1968 and by the late Eighties the mouse – now with a ball instead of wheels – had become a crucial interface tool, both in general purpose computing and gaming. Our thoughts are with William's family and friends at this time.

POPULAR POCKET

ANALOGUE'S FPGA-BASED HANDHELD CONSOLE SEES ENORMOUS DEMAND

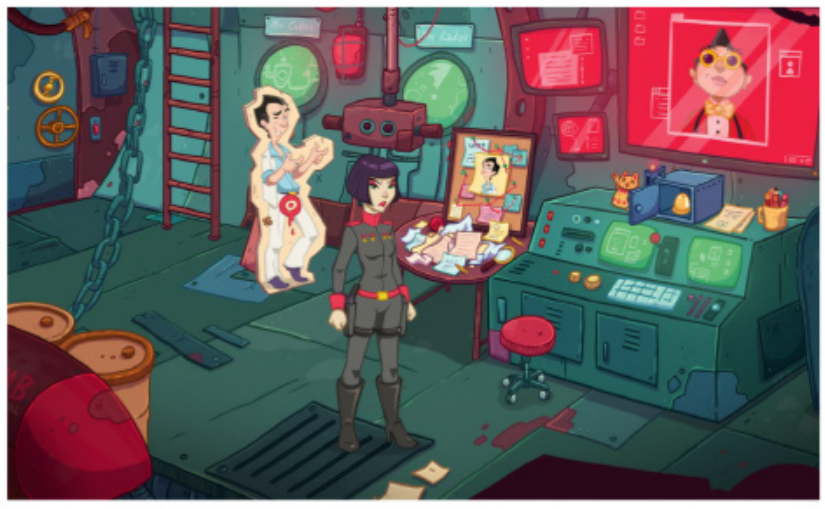
Despite a limit of two per customer and a $199.99 price tag, the forthcoming Analogue Pocket recently sold out within just 15 minutes of opening preorders, leaving plenty of players out in the cold. The company has responded to the demand with a statement on Twitter, saying, "We will be producing more and do our best to meet demand during this unfortunate global state of affairs."

Regular readers will remember that we spoke to console manufacturer Analogue about its upcoming console in issue 201, but for those unfamiliar with the project, the Analogue Pocket is a new handheld console that supports old cartridges, but offers modern functions such as a high-resolution LCD display and rechargeable battery. The Game Boy, Game Boy Color and Game Boy Advance are supported as standard, with adaptors for the Game Gear, Lynx and Neo Geo Pocket Color. Like previous Analogue consoles, the system uses field-programmable gate array (FPGA) technology to ensure maximum compatibility with the classic hardware, and for the first time includes a secondary FPGA for users to create their own system cores.

The Analogue Pocket is due to ship in May 2021. We'll bring you a review when the unit arrives.

» Both the black and white models were sold out within minutes of going on sale.

» [PC] We picked out some images without dicks in. This was harder than it would be for most games. (Hah, hard.)



» [PC] This submarine looks like a hunk of junk, which is coincidentally where the target is painted on Larry.

LARRY RISES AGAIN

HE'S BACK FOR HIS HARDEST ADVENTURE YET

Stand to attention – the lewdest point-and-click star in gaming history is back and ready for action, as *Leisure Suit Larry: Wet Dreams Dry Twice* is heading to PC and Mac. In this sequel to 2018's *Leisure Suit Larry: Wet Dreams Don't Dry*, Larry Laffer is about to wed his true love Faith, but becomes separated from her following unforeseen events. Understandably deflated, he's got to pump himself up and get through the hard times he faces, avoiding the temptations and challenges that threaten to come between him and his happy ending. As usual, for players that will mean taking on a variety of puzzles and quests, often involving the odd phallic object, over 50 hand-drawn screens. Developed by CrazyBunch and published by Assemble Entertainment, *Wet Dreams Dry Twice* is due for release on 15 October via Steam and GOG, priced at £30.99.

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Who is Iain Lee?
Iain Lee is a freelance broadcaster who loves gaming, particularly retro gaming. Join him as he hosts a phone-in show and plays games at www.twitch.tv/iainlee and also check out www.patreon.com/iainlee.

Taped up

It's all about cassettes for me. Tapes. I love 'em. Don't they feel amazing? The rattle they make when you shake them. The texture of the little teeth in the holes. The hunt for some Sellotape to cover up one of the popped-out toggles because you found something even more important to record than the thing you thought you wanted to keep forever. The number of times I've taped over treasure from when I was a kid so I could record some rubbish off the radio…

Cassettes are quite simply the best way to experience games. We joke about the loading times, but have you seen how long you have to wait to play a game when you haven't switched on your PS4 for a week? Updates, all the time. With a tape, THE WHOLE GAME WAS ALREADY ON THERE! Imagine! No patches, no DLC, nothing. The game *was* the tape.

Actually, the loading times really were part of the experience. That delicious anticipation as the cogs wound slowly round. Quite often I'd sit there with a mate silently watching the wheels. We'd just sit there and wait. What was there to say? Nothing! The game was chosen, the conversation would resume when the game started.

With tapes we also got the art of the loading screen. There is something like that today but – and I'm stumbling into 'old man' territory here – it's just not the same. The graphics on the loading screen were often nothing like what you'd get in the game and that was part of the package. I have a mate who as a kid just made loading screens. He wasn't interested in building games, his pleasure came from just designing images that would go before the games he never made. Wonderful.

There were also tricks we all had if the tape didn't load properly. On the BBC I had a hokey copy of *Commando,* and around the 2B mark there was a dip in the audio. If you did nothing, you just got the 'BAD DATA' line, so what you had to do was anticipate it and just before, push down the play button a bit harder. Not too hard, mind – that would mess it up as well. The pressure had to be *just so* and then you'd sail past the dodgy block. Magic!

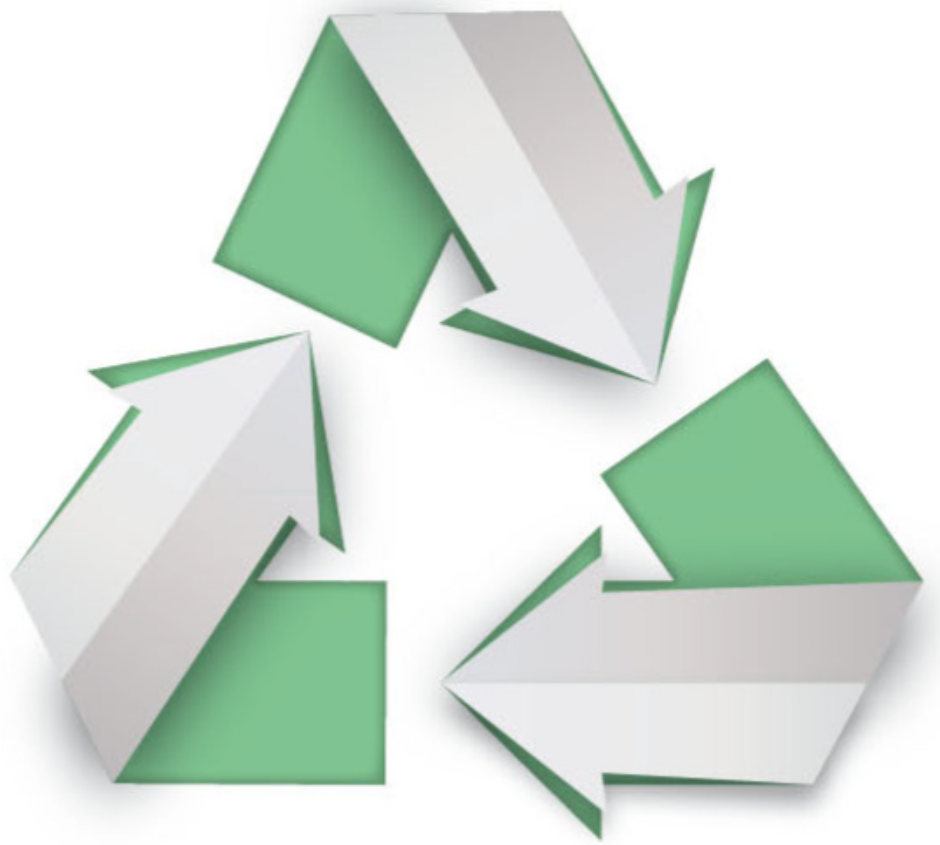
The industry hated tapes because they were so easy to copy. That wasn't always true. Tape-to-tape copying wasn't available to everyone for a long time. One trick I had to try and copy games was to have two portable tape players next to each other. I'd press play on one at full volume and record on the other, and then sneak out of the room. I honestly can't remember if it ever worked – I'm pretty sure it didn't. Still, I would try it thinking that this time would be different. The actual definition of insanity.

But then again, I am a 47-year-old man mentally exciting myself thinking about C90s, so, yeah, I guess I am pretty insane. *

> "The industry hated tapes because they were so easy to copy. That wasn't always true. Tape-to-tape copying wasn't available to everyone for a long time"

Do you agree with Iain's thoughts? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com



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LOVE PAPER

Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine *Digitiser*. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of *Digitiser The Show* at www.bit.ly/biffo2000.

Need for greed

Decades ago, I was lucky enough to visit Virgin Interactive's offices in Los Angeles, with *Bad Influence* star Violet Berlin.

Don't think for a second that the life of a videogame journalist was all fancy trips overseas, and glitzy junkets with glamorous celebs. There was a degree of that, of course, but you also have to remember that I wrote *Digitiser* for Teletext, which most games company PR people viewed as having all the contemporary relevance of a recently defrosted Palaeolithic hominid daubing review scores on a cave wall.

This is part of the reason the trip has stuck with me – I just didn't get to go on that many. But also, Virgin Interactive was a pretty happening company at the time. *RoboCop Vs The Terminator*, *Dune II*, *Alien 3*, *Cool Spot*, *Cannon Fodder*, *Disney's Aladdin* et al were fresh in the memory, and the company seemingly could do no wrong. *Even The 7th Guest* – the first blockbuster interactive movie on CD-ROM – had created a stir, even though it never really lived up to the considerable hype.

On that visit, I remember being ushered into a small room, and listening awkwardly while Tommy Tallarico demonstrated his Vocoder guitar. I remember a demonstration of some real-time virtual avatar technology that eventually ended up on BBC Saturday morning kids show *Live & Kicking*. But most of all, I remember a demo of a game called *Greed*.

We were told not to talk about it, so of course we absorbed as much info about it as possible. It was moulded in the *RoboCop Vs The Terminator/ Alien 3* template; a violent, side-scrolling, platform shoot-'em-up, but with a clear influence from *The Running Man*. I recall the concept was that players were involved in a to-the-death game show, and earned money for their murder.

It stuck with me, because a) it looked great, and b) it never got released. In fact, details of *Greed* weren't even leaked; the game clearly never made it far enough for it to be announced. This in itself fascinated me, because it made me wonder how many other great games were never released, that the world has no knowledge of.

How many other games are lost to time, which exist as nothing more than memories of a proof-of-concept demo? If I hadn't been in those offices, at that particular time, I'd never have known about *Greed*. There's no mention of it anywhere online, as far as I can tell. Whatever happened to it – maybe it was deemed too similar to other Virgin Interactive games, or perhaps simply too violent – I've never seen it mentioned, other than the handful of times I've written about it. There have been moments where I've even questioned whether I somehow imagined it.

So, do me a favour. If any of you run any websites dealing with unreleased games, or fancy updating Wikipedia, please add *Greed* to the list. It may have never come out, it may not have even made it that far in development, but it still deserves its place in the pantheon of almost-weres.

> "The game clearly never made it far enough for it to be announced. This in itself fascinated me, because it made me wonder how many other potentially great games were never released"

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

From bedrooms to consoles

Nicola and Anthony Caulfield discuss their new PlayStation documentary

Originally announced on Kickstarter in 2016 with a planned 2017 release, *From Bedrooms To Billions: The PlayStation Revolution* is finally with us and is a fitting tribute to Sony's popular console brand. Here, Nicola and Anthony Caulfield reveal how it all came together.

Why focus on PlayStation?

Nicola Caulfield: In the early Nineties there seemed a growing dissatisfaction from some developers with the games industry, which at that time was becoming more and more cartridge-dominated, with some developers leaving the industry altogether due to the risk-averse nature that was creeping in because of the expensive cartridge-based business model. The PlayStation seemed to change a lot of this attitude, but on many levels, not just one specific thing, so we felt a feature-length film would give us the space to explore this further.

What has it been like, tracking down Japanese developers compared to British ones?

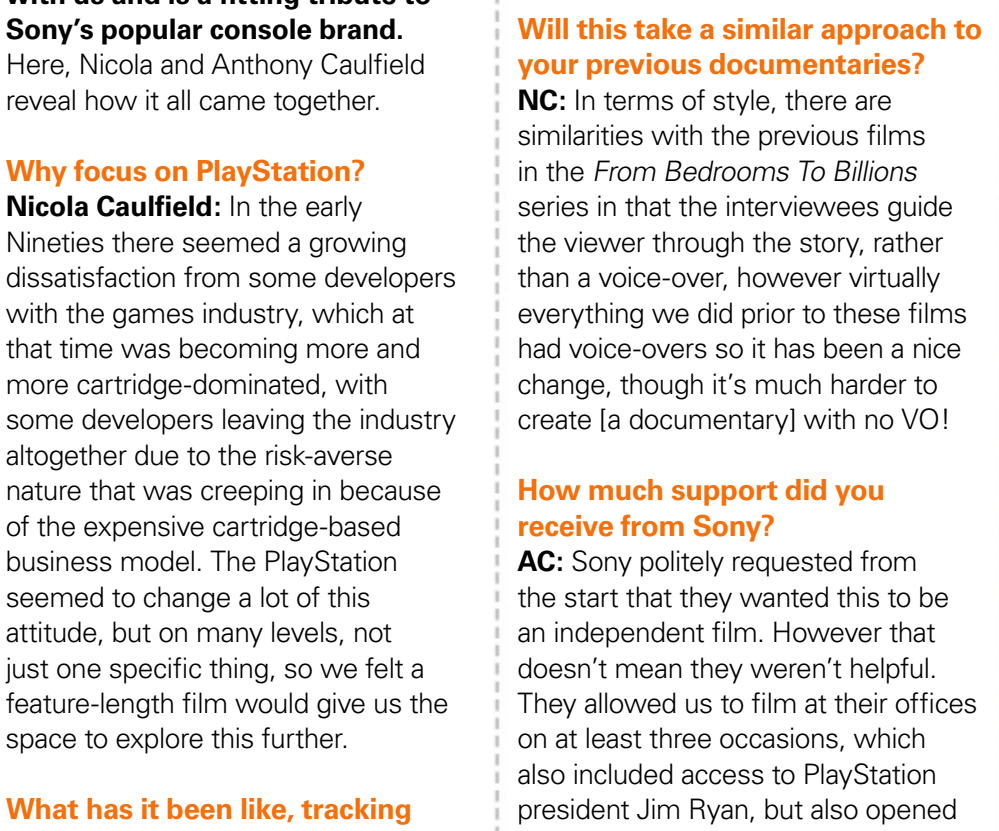
Anthony Caulfield: The process was definitely harder but more because we had to establish all-new contacts, which thankfully we were able to do, but it just took time as they then needed to understand and support what we were trying to do.

Will this take a similar approach to your previous documentaries?

NC: In terms of style, there are similarities with the previous films in the *From Bedrooms To Billions* series in that the interviewees guide the viewer through the story, rather than a voice-over, however virtually everything we did prior to these films had voice-overs so it has been a nice change, though it's much harder to create [a documentary] with no VO!

How much support did you receive from Sony?

AC: Sony politely requested from the start that they wanted this to be an independent film. However that doesn't mean they weren't helpful. They allowed us to film at their offices on at least three occasions, which also included access to PlayStation president Jim Ryan, but also opened up their visual archive to us for several days and even helped us copy hours and hours of archive footage, which proved very helpful.



» Nicola and Anthony have now made several retro gaming documentaries.

» Nicola hard at work filming *From Bedrooms To Billions: The PlayStation Revolution.*

» PlatinumGames' Hideki Kamiya (left) and Capcom's Jun Takeuchi swap jokes at Capcom's HQ.

» It took Nicola and Anthony a year of careful planning to get Hideo Kojima and Yoshinori Kitase on board.

» Sony's Paul Holman showing off an early PlayStation at Sony HQ.

What makes *The PlayStation Revolution* stand out from similar documentaries?

NC: With this film we feel it's nice to have the wonderful line-up we have with a great spread of interviews from across several countries. To edit this together and make it flow took a lot of time, but we kept chipping away until it flowed right and we hope that fans of the PlayStation will constantly be surprised by game creators suddenly popping up.

You've made several retro documentaries now, what are the hardest hurdles to navigate?

AC: It's always got to be getting access to the people you want so you can establish a great variety of interviewees. In addition, once you're editing to get the balance right of what you include, one person's vital fact can be another's mere footnote. […] They also need to entertain and, where possible, be accessible to those new to the subject matter.

Any interesting anecdotes you can share?

AC: We were particularly proud to be able to get a small reunion of the original *Resident Evil* team together at Capcom, and while we were dressing the set, they kept coming to us with one legendary prop after another across many of the games, such as the save game typewriter and pistol from the very first game. […] Everyone was taking photos and smiling, so it was a very special moment for all of us!

Any future projects planned?

NC: We formally started working with Rebellion Studios early into the production of *The PlayStation Revolution*. This relationship has now continued into the production of a long-form series that explores the evolution of videogame design since the Sixties to the present day. It's called *The Evolution Of Video Games* and we have been editing away at it for some time now. It has a cast list from all over the world, so it should be something quite special.

***From Bedrooms To Billions: The PlayStation Revolution* is available in digital and physical forms from 7 September. Head over to bit.ly/playstation_revolution for more information.**

BACK TO THE NOUGHTIES

OCTOBER 2003 – Christmas is coming and who will take an early lead? Well, with the speed of F-Zero GX, Nintendo might have it clinched. Nick Thorpe time travels to warn himself against taking that data entry job, then picks up some magazines…

[GameCube] Bright, bold and blindingly fast – *F-Zero GX* was great, but could it shift Nintendo's hardware stockpile?

NEWS OCTOBER 2003

On 7 October, Californians went to the polls in a recall election. Democratic governor Gray Davis, who had suffered a decline in popularity due to a perceived failure to manage an energy crisis in the state, was recalled with a 55% majority. With 135 candidates running to replace him, the winner was the Hollywood star and Republican Arnold Schwarzenegger, who took 48.6% of the vote and defeated sitting lieutenant governor Cruz Bustamante who took 31.5%.

China launched its first manned space mission on 15 October, from the Jiuquan Satellite Launch Centre. Former People's Liberation Army fighter pilot Liwei Yang was the only astronaut aboard the Shenzhou 5 spacecraft, which was launched into orbit atop a Long March 2F rocket. During his 21-hour mission, he orbited Earth 14 times and communicated with both mission control and his wife. The astronaut has received domestic and international awards, including Russia's Gagarin medal and the UNESCO Medal on Space Science.

In British politics, prime minister Tony Blair was rushed to hospital on 19 October due to heart problems, later identified as an irregular heartbeat. Ten days later, Iain Duncan Smith resigned after just two years as leader of the Conservative party, having lost a confidence vote triggered by his backbench MPs. He would be replaced by Michael Howard, who was elected unopposed on 9 November.

THE LATEST NEWS FROM OCTOBER 2003

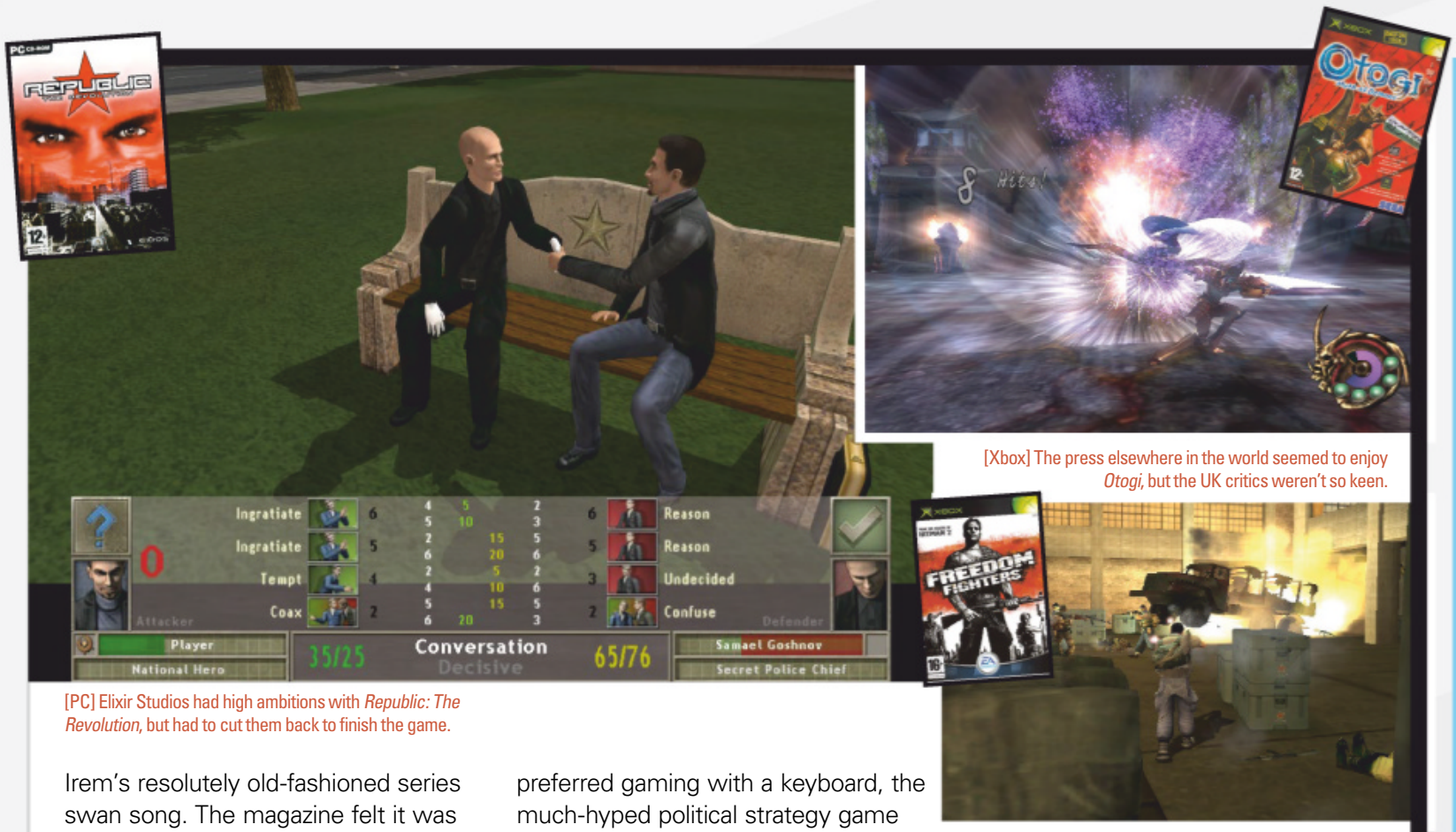
***F-Zero GX* has finally arrived, and *games™* neatly summarised our feelings on the month's big import by asking, "How can a game travelling at over 1,000 km/h take so long to reach us?"** But frustration at the wait quickly turned to joy as the press realised that Nintendo's first development partnership with Sega was every bit as good as had been promised. *NGC* felt that because the developers had added trackside detail that the N64's *F-Zero X* had lacked, "the experience is far more exhilarating than anything the *F-Zero* series has ever delivered". The magazine scored the game 93%, and *games™* was just as impressed, awarding a 9/10 score to what it felt was "a deceptively deep title with a level of variety seldom seen in the genre". *Edge* scored it 8/10 saying, "No one expected a radical departure from the *F-Zero* heritage, but the surprise here is that Amusement Vision has bettered the previous Nintendo-developed versions."

Also out on import, *Mario Golf: Toadstool Tour* offered family sports fun. *NGC* felt that the game offered "as much depth as any of its competitors, and considerably more character", awarding it 85%. It also earned 8/10 in *games™*, but *Edge* was less impressed and scored it 6/10, questioning whether anyone "will be prepared to dig beneath the old-fashioned thinking and the inept presentation" to find its better qualities. Nintendo would have been hoping that those games would shift some hardware, as *Edge* reported that it had recently had to put GameCube production on hold, "in order to allow the company to clear a backlog of inventory". If they didn't, what would? The only other exclusive on the horizon was *WWE WrestleMania XIX* (68% *NGC*), and people were hardly going to buy the console for slightly underwhelming wrestling games.

Then again, it wasn't like the other consoles were doing much better. Sony didn't need any help selling consoles, but that was good because the PS2 exclusives on offer were always destined to become cult favourites rather than blockbuster hits. "It is only the hardware that will convince most players this is a modern game. Those weaned on *Medal Of Honor* or *SOCOM* will despise *R-Type Final* for everything it does," *Edge* astutely observed of

[Xbox] With no notable competition, Colin McRae's latest rally outing was dependable but lacking in new ideas.

[PS2] If Irem really was retiring its venerable shoot-'em-up series, it was at least doing so in style.



[PC] Elixir Studios had high ambitions with *Republic: The Revolution*, but had to cut them back to finish the game.

[Xbox] The press elsewhere in the world seemed to enjoy *Otogi*, but the UK critics weren't so keen.

[Xbox] *Freedom Fighters* explores an alternate timeline where Moscow is a hostile foreign power, instead of reality where… oh.

Irem's resolutely old-fashioned series swan song. The magazine felt it was "dangerously close to the best in the genre" and gave it 8/10, while *Play*'s enthusiasm for the "bloody excellent shoot-'em-up" saw it award an 89% score. Namco's import RPG *Xenosaga Episode I: Der Wille Zur Macht* scored 83% in a rather belated review in *Play*, with the reviewer commenting that despite the abundance of cutscenes, "the balance of action and watching soon levels out", and that the game "looks great and plays just as well".

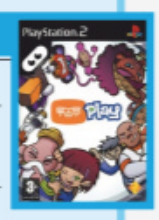
XBM was concerned about Microsoft's prospects at Christmas, though magazines were catching up with their *Star Wars: Knights Of The Old Republic* reviews following the *Official Xbox Magazine* exclusive the previous month. It scored 9/10 in both *games™* and *Edge*. A distinctly Japanese game like *Otogi* was always in for a rough ride on Xbox, and FromSoftware's hack-and-slash scored just 6/10 in *games™* and 5/10 in *XBM*, with the latter claiming that it "fails to engage the player at a basic level" and becomes repetitive. For those who preferred gaming with a keyboard, the much-hyped political strategy game *Republic: The Revolution* failed to live up to expectations on PC. *Edge* bemoaned the "cumbersome user interface" and "3D engine that's surplus to requirements", awarding a 6/10 score with the conclusion "what promised to be revolutionary has emerged as a mere curio".

If you were looking for something a bit more mainstream, you'd need to turn to multiplatform releases. *Colin McRae Rally 04* scored 9/10 in *XBM* and 93% in *Play*, with the former saying that Codemasters' sequel "doesn't have the wow factor that the first, second or even the third game had" but was "by default, the best rally game to date". Slightly less impressed was *games™*, which awarded it 7/10. IO Interactive's third-person squad shooter *Freedom Fighters* pitted Americans against occupying Soviet forces, and received a broadly positive reception. *XBM*, *Cube* and *games™* all gave it 8/10, while *Play*'s enthusiasm for the game which had "the whole team crowded round a TV, jostling for the next go" earned it 92%. *Edge* scored it 6/10 and criticised the "dolefully, desperately dumb" enemies and weapons that failed to offer "the visceral satisfaction a game like this needs". If you fancied your squad-based shooting with more uncomfortable timeliness, *Conflict: Desert Storm II* (7/10 *XBM*, 7/10 *games™*, 87% *Play*) was "more of the same but still good fun" according to *games™*. Film tie-in *The Italian Job: LA Heist* was hugely divisive (3/10 *XBM*, 54% *NGC*, 85% *Play*), though its short length was a common criticism. Lastly, *Disney Extreme Skate Adventure* (74% *NGC*, 7.0/10 Cube, 7/10 *XBM*) was a surprisingly competent extreme sports tie-in for the under-ten crowd.

Join us again next month, as the pre-Christmas silly season starts kicking into high gear.

CHARTS

OCTOBER 2003

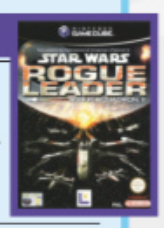


ALL FORMATS – UK

1 – EyeToy: Play (Sony)
2 – Pokémon: Ruby (Nintendo)
3 – Pokémon: Sapphire (Nintendo)
4 – FIFA 2003 (EA)
5 – Tomb Raider: The Angel Of Darkness (Eidos)

XBOX

1 – FIFA 2003 (EA)
2 – Medal Of Honor: Frontline (EA)
3 – Alien Vs Predator: Extinction (EA)
4 – James Bond 007: Nightfire (EA)
5 – Halo: Combat Evolved (Microsoft)



GAMECUBE

1 – Star Wars: Rogue Leader (LucasArts)
2 – Sonic Adventure DX: Director's Cut (Sega)
3 – The Legend Of Zelda: The Wind Waker (Nintendo)
4 – The Lord Of The Rings: The Two Towers (EA)
5 – FIFA 2003 (EA)

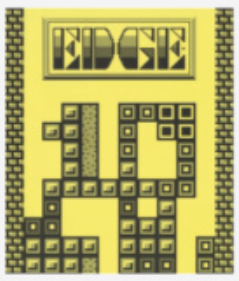
MUSIC

1 – Where Is The Love (Black Eyed Peas)
2 – Baby Boy (Beyonce ft. Sean Paul)
3 – Superstar (Jamelia)
4 – Sweet Dreams My LA Ex (Rachel Stevens)
5 – I Believe In A Thing Called Love (The Darkness)

THIS MONTH IN…

XBM

The team is worried that a spate of delays has damaged the Christmas prospects of the Xbox, and turns to a multiformat sibling for comment. "*Grabbed By The Ghoulies* is coming, but we don't see it as a real triple-A title," says Darran Jones of *games™*. "To us, it seems that Microsoft is pinning its hopes on *Project Gotham Racing 2*." History vindicates him.



Edge

Celebrating its tenth anniversary, *Edge* offers up ten different covers and includes a smart selection of retrospective features. These include interviews on the creation of the magazine, a look back at the magazine's few 10/10 scores, a top 100 games feature and an updated version of the 'Ten Commandments' feature from the first issue.

games™

Sony, Microsoft and Nintendo might be hogging the limelight elsewhere, but this month's Retro section shines a light on two new Japanese releases for alternative formats. Arcade blaster *Border Down* is Dreamcast-bound, while SNK Playmore has confirmed crossover fighter *SVC: SNK Vs Capcom Chaos* for PS2, Xbox and Neo Geo AES.

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PLAYING WITH SUPER POWER

INSIDE THE SUPER NINTENDO

30 YEARS SINCE IT HIT JAPAN, MANY PLAYERS STILL FEEL THAT THE SUPER NINTENDO IS THE BEST CONSOLE EVER MADE. WE SPEAK TO VETERAN SNES DEVELOPERS TO FIND OUT HOW THE GAMES THAT MADE THIS GREY BOX LEGENDARY WERE SHAPED BY WHAT WAS INSIDE OF IT

WORDS BY NICK THORPE

Videogames hardware production is a fascinating business, and one that has a couple of odd, counterintuitive quirks. The first one is that technological superiority is usually more harmful than it is helpful – if power drove sales, we'd still be talking about the dominance of the Atari Lynx and Xbox. The second is that success is hard to sustain for two generations in a row. All too often, companies have followed up their most popular systems with machines that range from underwhelming to total bombs, such as the Atari 5200, Saturn and Xbox One. As the longest tenured hardware manufacturer in the business, Nintendo has hardly been immune from these truths, with the Nintendo 64 and Wii U serving as ample proof. But it has produced the only machine we can think of that served as an exception to both of those statements at the same time – the Super Nintendo Entertainment System, or Super Famicom as it's known in Japan. But as readers will know, it's far more than just a historical anomaly, and is one of the most highly regarded platforms in the history of videogames, and much of its success can be attributed to Nintendo's hardware design prowess. ▶

MIKE DAILLY

■ During the SNES years, the *Lemmings* co-creator was a programmer working on a variety of formats. Today, he owns the indie developer Ogre Games.

CHRIS WEST

■ Having coded games for Domark and Vivid Image during the SNES days, Chris'd go on to found West Racing with his brother Tony, which is still active today.

JAZ RIGNALL

■ Beginning the SNES era on *CVG*, Jaz would launch the legendary *Mean Machines* before going on to work on SNES games such as *The Jungle Book*.

NICK JONES

■ Starting the SNES era at Probe, Nick would move to the USA to new studio Shiny. He now works on the *NBA 2K* series at Visual Concepts.

TONY WEST

■ Working closely with his twin brother Chris, Tony provided art for games such as *Marko's Magic Football* and *Street Racer*, before the pair started West Racing.

> WE WROTE ABOUT IT WITH A FAIR BIT OF HYPE AT THE TIME, IT MUST BE SAID, WITHOUT REALLY KNOWING THAT MUCH ABOUT IT OTHER THAN THE TECHNICAL SPECIFICATIONS
>
> JULIAN 'JAZ' RIGNALL

SUPER NINTENDO
ENTERTAINMENT SYSTEM

GET ON BOARD

A GUIDE TO THE CHIPS THAT MAKE UP THE SNES

S-WRAM

This is 128KB of working memory for the system, dedicated to storing program code. Graphical data and sound samples are stored in their own dedicated chips. The original spec for the console included much less RAM, just 32KB, which wouldn't have been enough.

S-CPU

The Ricoh 5A22 is a custom variant of the 16-bit WDC 65C816 CPU, with some extra functions. Existing Nintendo developers would have been comfortable moving to this CPU, as it is a relative of the MOS Technology 6502 CPU family that powered the NES.

S-APU

The audio hardware for the SNES. This was initially packaged as two main chips, the S-SPC and S-DSP, both of which were part of a separate circuit board. They were integrated into the main board in 1993, and combined into the S-APU chip in 1995.

S-PPU 1+2

These two chips together form the custom video hardware of the SNES. To reduce cost and complexity, in 1995 these chips were combined with the CPU into a single chip named S-CPUN A. These 'one-chip' models are noted for their excellent RGB output.

CIC

This is the lockout chip that prevents PAL games from running on NTSC consoles, and vice versa. The only thing preventing a Japanese NTSC game running on an American NTSC console is the shape of the cartridge, leading to very simple region mods.

» [SNES] *ActRaiser* was a fine-looking game, but the real treat was its orchestral audio by Yuzo Koshiro.

» [SNES] No shoot-'em-up had ever looked quite like *Axelay*, with the way its scenery rolls over the horizon.

» [SNES] In *Contra III*, Konami faked a second layer of rotation by using sprites to draw the ground and Mode 7 for the boss.

In the late Eighties, Nintendo was the powerhouse of the videogames business. The Famicom had successfully conquered the Japanese market, and it had successfully exported the technology to the USA, reviving its console business following the crash of 1983. Like any company with a successful product on the market, Nintendo was not particularly keen on abandoning the NES, but the people at the top were aware of new technology on the horizon – mostly because Hudson Soft had initially tried to sell it to Nintendo. Having been turned down, Hudson joined forces with electronics giant NEC to launch the PC Engine in October 1987. The small, powerful machine captivated Japanese players, with over half a million units sold in just its first few months on the market. This coincided with a downturn in domestic Famicom sales, and while Nintendo was still the market leader, it clearly couldn't rest on its laurels. Late in September of 1988, Sega announced its 16-bit Mega Drive, just a month ahead of its October release. If Nintendo didn't show its hand soon, there was a real chance that players would drift to these new machines.

In November 1988, Nintendo invited hundreds of members of the Japanese press to its announcement of its new 16-bit console – the Super Famicom. Not long after, it found its way into *Computer & Video Games* courtesy of Julian 'Jaz' Rignall. "We used to buy Japanese magazines from a shop near St Paul's [Cathedral], near to where our offices were. We'd buy these magazines every month for the most part just to see what was happening on the Mega Drive and PC Engine, those were the most popular consoles at the time. We bought some one month and lo and behold, there were some pictures of the Super Famicom," he recalls. "We got the news stories translated and turned them into news pieces for *CVG*, and we published the first pictures in the UK – which were literally snipped out of a Japanese magazine with scissors."

This early showing confirmed many of the technical details of the SNES, including its 16-bit CPU, its support for 256 simultaneous colours on-screen, its eight background modes with larger sprites and its custom sound system. The system's most impressive technical capability was its ability to rotate and scale backgrounds, shown off via a flight simulation demonstration. A new controller was also shown, featuring four face buttons in a diamond configuration and two shoulder buttons. One thing the console wouldn't support was backwards compatibility, though at this stage the system sported an AV input that the new 'Famicom Adapter' console model could be routed through. No games were shown, but it was made clear that a fourth *Super Mario Bros* and a third *Zelda* were in development.

> "WE GOT THE NEWS STORIES TRANSLATED AND TURNED THEM INTO NEWS PIECES FOR CVG, AND WE PUBLISHED THE FIRST PICTURES IN THE UK – WHICH WERE LITERALLY SNIPPED OUT OF A JAPANESE MAGAZINE WITH SCISSORS"
>
> JULIAN 'JAZ' RIGNALL

When the Super Famicom was shown off again in July 1989, it was close

» [SNES] *Donkey Kong Country* looked simply stunning in 1994 and contributed to extending the life of the SNES.

» *Super Mario Kart* built on *F-Zero*'s racing potential and provided some unmissable multiplayer antics.

» [SNES] If you're a programmer looking for further insight into SNES *Doom*, the source code is available at: github.com/RandalLinden/DOOM-FX.

» [SNES] Nick Jones had to change how this scene was drawn at the last minute due to a hardware bug.

to complete. The case design was much closer to the final, with the notable differences including an extension port on the front of the console with the control ports, a headphone jack on the right of the console and a red power switch. The AV inputs for looping the Famicom Adapter through had been dropped, too. The specifications were also basically the same as the final machine, with the exception of its work RAM which was just 32KB compared to 128KB in the final machine. This time, games were shown off, too. *Super Mario 4* was in a very early state, with a mushroom-shaped world map and plenty of *Super Mario Bros 3* elements that wouldn't survive development, while that initial flight simulator demo had morphed into *Dragonfly*, a sci-fi flight game. But what would have seemed most surprising at the time was that the console was still at least a year away. While Nintendo doubtless wanted to perfect its own games, which were still in a very early state, it had also struggled to satisfy software demand in the early days of the Famicom. By allowing third-party developers plenty of time to prepare their own games for launch, it would not have the same problems this time.

> FINAL FIGHT WAS A POPULAR ARCADE GAME WITH HUGE SPRITES AND SEEING THAT COME TO LIFE IN A VERY AUTHENTIC VERSION WAS REALLY COOL. THAT WAS SOMETHING THAT WE GOT EXCITED ABOUT WHEN WE REVIEWED IT
>
> JULIAN 'JAZ' RIGNALL

In the days before globalisation and the internet had taken hold of society, such showings were for the domestic market only as Nintendo could enact region-specific plans as it saw fit. This meant that marvelling at the screenshots was as close as Jaz got to the machine. "That's all that we had at the time, was the screenshots. But we were very excited – we trusted Nintendo, we thought the machine would be pretty awesome, so we were already getting really excited about it." The *CVG* team passed this excitement on to the readers. "We wrote about it with a fair bit of hype at the time, it must be said, without really knowing that much about it other than the technical specifications." This approach worked, though – as did Nintendo's slow approach to delivering the console. When the Shoshinkai show of August 1990 rolled around, plenty of Super Famicom software was available to see. Third parties brought the likes of *Final Fight*, *Gradius III* and *R-Type II*, while Nintendo provided the newly named *Super Mario World*, as well as the futuristic racer *F-Zero* and computer adaptation *SimCity*.

In November 1990, the Super Famicom launched in Japan to enormous demand, and Jaz was one of the first in the UK to get access to the new console on import. "Everybody wanted to look at *Super Mario World*, we didn't know much about *F-Zero*. I just remember the entire office stopping and piling into the games room to watch the games being played, and it not disappointing." Part of the reason for going straight to *Mario* was that screenshots couldn't convey the strength of the console's signature ability. "We had no idea what was coming – we didn't really see Mode 7 until we received the machine," he recalls. "One of the games that we had with it was *F-Zero*. We were absolutely blown away by it, it was just an amazing graphical achievement at the time." Unsurprisingly, the Super Famicom was an instant hit in Japan. Nine months later in August 1991 it hit North America, rebranded as the Super Nintendo Entertainment System and redesigned with a boxier grey-and-purple look. UK gamers thankfully got the original Japanese look with the American name, but experienced Europe's traditional slow 50Hz conversions and long waiting times, with the system finally arriving in April 1992.

» [SNES] Mike describes *Lemmings 2* as one of the most technical games he's ever done, despite a console focus.

» [SNES] *Pilotwings* was one of the first SNES games seen, and would be the first to use an enhancement chip.

» [SNES] *F-Zero* was an early demonstration of just how Mode 7 set the SNES apart from every other system available.

» [SNES] *Final Fight* was a strong conversion, despite lacking both a main character and the multiplayer mode.

As the games started rolling in, players had plenty of new reasons to be impressed with the console. "*Final Fight*, that was definitely a huge game," says Jaz. "It was a popular arcade game with huge sprites and seeing that come to life in a very authentic version was really cool. That was something that we got very excited about when we reviewed it." Other favourites were very polished examples of tried-and-true archetypes. "*F1 Exhaust Heat* was another early Mode 7 game that I remember getting really excited about, because it was more of a 'racing car' racing game – I've always been a fan of more traditional racing games," Jaz remembers. "*UN Squadron* was a nice, slick shoot-'em-up that played well and was graphically impressive, even though at the time we were getting a little bit tired of all the horizontally scrolling shoot-'em-ups."

For Nick Jones of Visual Concepts, who was already a veteran coder at the time, *Contra III* was the game that really proved impressive. "I remember playing that for the first time. I was just blown away with how the game kept changing. They didn't have just the traditional 'scrolling background', they sought to make the background interactive. I remember one of the bosses where it ripped open the background and the boss was in the distance. Very creative," he remembers.

TECH TRICKS

THE SPECIAL EFFECTS THAT THE SNES WAS BUILT TO PERFORM

COLOUR BLENDING

Nintendo's hardware is capable of performing mathematical operations between pixels on different layers, in order to produce transparency effects.

OFFSET PER TILE

This effect allows pixels to be shifted up and down in eight-pixel-wide columns, producing effects like the undulating snake body in *Aladdin*'s final boss fight.

WINDOWING

The SNES can selectively choose not to draw certain regions of a screen, across any combination of layers. Funky shapes are achieved with DMA instructions.

MOSAIC

You know how some people's faces get pixelated on TV for privacy reasons? The SNES can do that to any of your background graphics, and often does.

HIGH RESOLUTION

It's possible to run the SNES in a 512x448 interlaced mode for increased detail. Very few games ever did this, with *RPM Racing* being one of them.

SUPER NINTENDO ENTERTAINMENT SYSTEM

A LA MODE

EVERYONE KNOWS ABOUT MODE 7, BUT WHAT BENEFITS DO MODES 0-6 GIVE YOU? HERE'S A HANDY GUIDE TO NINTENDO'S FLEXIBLE FRAME CONSTRUCTION METHODS

	BACKGROUND 1	BACKGROUND 2	BACKGROUND 3	BACKGROUND 4	MOSAIC	WINDOWING	COLOUR BLENDING	OFFSET PER TILE	DIRECT COLOUR MODE	TRUE HIGH RESOLUTION
Mode 0	Four-colour palettes (up to 32 unique colours)	Four-colour palettes (up to 32 unique colours)	Four-colour palettes (up to 32 unique colours)	Four-colour palettes (up to 32 unique colours)	ON	ON	ON	OFF	OFF	OFF
Mode 1	16-colour palettes	16-colour palettes	Four-colour palettes	Inactive	ON	ON	ON	OFF	OFF	OFF
Mode 2	16-colour palettes	16-colour palettes	Inactive	Inactive	ON	ON	ON	ON	OFF	OFF
Mode 3	256-colour palette	16-colour palettes	Inactive	Inactive	ON	ON	ON	OFF	ON	OFF
Mode 4	256-colour palette	Four-colour palettes	Inactive	Inactive	ON	ON	ON	ON	ON	OFF
Mode 5	16-colour palettes	Four-colour palettes	Inactive	Inactive	ON	ON	ON	OFF	OFF	ON
Mode 6	16-colour palettes	Inactive	Inactive	Inactive	ON	ON	ON	ON	OFF	ON

» [SNES] The SNES was particularly well-suited to prerendered 3D in games like *Rendering Ranger* due to its wide colour palette.

» [SNES] Mike cites *Secret Of Mana* as one of the SNES titles he was impressed by, due to the quality of the pixel art.

> THE SNES AND NES ARE VERY SIMILAR AS FAR AS OVERALL DESIGN; THEY BOTH FEATURE A CPU THAT'S 6502-BASED AND HAVE SEPARATE PPU AND SPU PORTIONS OF THE HARDWARE
>
> RANDY LINDEN

"And when I was hanging onto a missile under a helicopter, only to discover the missile got fired while I was hanging on to it. I'd been playing games for a long time before this, but to watch how they creatively switched the gameplay up, I found myself many times saying, 'No way.' I honestly couldn't tell what was sprites and what was playfields. It was very impressive for its time." And of course, we shouldn't discuss impressive games without mentioning the biggest arcade game in the world at that time, *Street Fighter II*. The SNES had a very authentic conversion, and for over a year no other console did.

So from a gamer's perspective, Nintendo's console was on a new level – and for coders used to working on the 8-bit NES hardware, it was a huge and very welcome step up that didn't require the wheel to be reinvented. "The SNES and NES are very similar as far as overall design; they both feature a CPU that's 6502-based and have separate PPU (picture processing unit) and SPU (sound processing unit) portions of the hardware," says Randy Linden, who programmed the SNES conversion of *Doom*. "Even simple things on the NES, like scrolling graphics, required specialised cartridges, but the SNES had built-in scrolling. The SNES could do some very powerful graphics effects that weren't possible on the NES, for example, the number of graphics 'layers' was much higher on the SNES than on the NES."

It wasn't just NES coders that loved the SNES, as programmers moving from other 6502-based systems also loved it. "Up until the SNES came out I had exclusively done games on the Commodore 64, and I first got a chance to try the SNES out after finishing *Super Space Invaders* for the C64," says Chris West, now of West Racing. "I was given the job of writing *Marko's Magic Football* for the SNES at Domark and it was like a whole new world compared to the C64. The CPU being 16-bit made coding much easier after being stuck with 8-bit, and the processor being 350% faster was also great, but it was the fact you had so many sprites and so much more VRAM – it just felt like a new world of potential for doing games. For example, in *Marko's Magic Football* I did a full physics simulation on the ball for bouncing, and friction from spinning. I couldn't do that on the C64."

But did developers feel that the console represented a step up from the 16-bit machines that it was supposed to be competing with? "From Amiga/ST, sure. Lots of nice hardware to use compared to them, which is nice," says Mike Dailly, who was then working at *Lemmings* developer DMA Design. However, Mike had also been working on the PC Engine, and the advance there was not so great. "Although the graphics hardware was nicer in general, there were some limitations that were a little frustrating by comparison. Graphics could only be uploaded to VRAM in the VBlank, whereas on the PC Engine you could do it at anytime, and the CPU on the PC Engine was much faster – though I did love the 16-bit nature of the 65816." Mike's main experience with the console came with *Lemmings 2: The Tribes*, and the CPU was a real help to him. "I had to use lots of tricks to get *Lemmings* working, especially as I had to software draw most things. The 16-bit nature was lovely, though, and made working with the large ROMs much easier than a plain 6502. The PC Engine depended on 8K banking, and it was 'okay' but still tricky. The 24-bit addressing of the 65816 made life a lot simpler."

One thing that all of our developers agree upon is that the console's custom graphics hardware was amazing for its time. "The graphics and screen modes were very nice, probably the best video hardware of its time – which is why the slower CPU hurt sometimes," says Mike. "Sprites were pretty similar to the Mega Drive and PC Engine, but the tilemap screens were lovely, and Mode 7 kept things interesting!" For Chris, it was the system's colour capabilities that really stood out. "This along with the increase in resolution is just what made the SNES so exciting to us at the time. Going from being stuck with 16 basic colours, none of which ever quite suited what you needed, to a palette of 32,000 colours just felt so good." Tony West, who worked with

» The SNES pad built on the NES design and added in two extra face buttons as well as two extras inputs on the top – features that we can still see in controllers today.

» [SNES] *Star Fox*'s Super FX 3D may look primitive now, but it was fast and smooth compared to the contemporary competition.

» [SNES] *Street Racer* managed a good Mode 7 implementation, despite the handicap of not being able to use enhancement chips.

» [SNES] Having *Street Fighter II* was a big deal for Nintendo, especially since the conversion was great.

Chris on graphics for SNES games such as *Marko's Magic Football* and *Street Racer*, chimes in to agree. "I was going to say how much nicer the SNES palette was compared to the Mega Drive, you could get much more subtle colours which is why I think all SNES games always looked so much better than the Mega Drive versions. For example, in *Street Racer* the cars and characters we made were converted over for the Sega version but they lost the subtle shading. The Mega Drive just had a load more contrast in its colours that jarred my eyes compared to the SNES."

One thing that Nick appreciated was the flexibility of the graphical hardware, which offered eight different modes of operation. "The display on consoles of this period were made up of screen playfields. Machines like the C64 and Spectrum only had one single playfield. The Sega Genesis allowed two playfields, and most people used the second playfield for parallax effects – drawing two playfields but moving one at a different rate to the other. But the SNES allowed you to chose from several video modes, the most powerful of which had the ability to display four playfields simultaneously. And another really cool trick was that it allowed you to combine the four playfields in a multitude of ways. It wasn't just a bunch of playfields drawn on top of each other. You could select *how* they were to be combined. For example, you could have one playfield be 'blended' with another playfield by being 'added' to it or 'subtracted'."

> THE SNES ALLOWED YOU TO CHOSE FROM SEVERAL VIDEO MODES, THE MOST POWERFUL OF WHICH HAD THE ABILITY TO DISPLAY FOUR PLAYFIELDS SIMULTANEOUSLY
>
> NICK JONES

Use of graphics modes depended on the needs of the game. "I usually went with a graphics mode that supported three playfields. The first playfield was usually used for the main playing area, the second playfield was used as a parallax effect but I utilised the third playfield in entirely different ways depending on the effect I wanted on that particular level," Nick explains. "For example, in the very first level of *Earthworm Jim*, I had my artist Steve Crow draw the third playfield as a bright sun with sun beams. And the second playfield was a layer of clouds that moved at half speed. I made the sun playfield be added to all of the other layers which gave everything a bright look. And as you moved across the level, if the sun appeared to go behind the clouds, I smoothly changed the palette of colours that made up the sun image to be black, so they stopped being 'added', and then smoothly changed the palette of colours back to their normal values when the sun came out. It looked stunning. These were all subtle little effects; they didn't change the gameplay but just made your game seem so much more polished."

» The high-quality output of games on the SNES means that it's now a much-coveted system to collect for.

The SNES sound hardware was also a major step up, and this was a custom design by Sony consisting of an independent CPU which drove a DSP unit. This was a true digital sound processor, capable of playing back any samples you liked, with up to eight simultaneous sounds played at once. However, there were some limitations – the samples had to fit in 64KB of RAM, which wasn't much space. Thankfully pitch modulation allowed each sample to serve as many notes, but even then they were quite often compressed to save space. Still, the results could be quite amazing – no other console of the time could have handled the magnificent orchestral sound of *ActRaiser*'s Fillmore stage theme, nor *R-Type III*'s grungy rock reinterpretation of the original game's opening stage theme.

But the SNES was not an unqualified triumph, with its CPU providing programmers with some serious headaches. "The most notable weak point was not just the clock speed of the processor but the power of the processor, too. It's hard to make your game run at 60 frames per second when the processor is slow. It's like running the 100 metres in sub-20 seconds, but with only one leg," says Nick. "Another place I found this extremely limiting was when the player would start a new level. The levels were stored compressed and would be uncompressed as needed. And

FRAME-UP

THE MOST COMMONLY USED GRAPHICAL MODE OF THE SNES IS MODE 1, WHICH OFFERS A GREAT BALANCE OF BACKGROUND LAYERS AND COLOUR DEPTH. HERE IS HOW EARTHWORM JIM USES THEM

LAYER 1

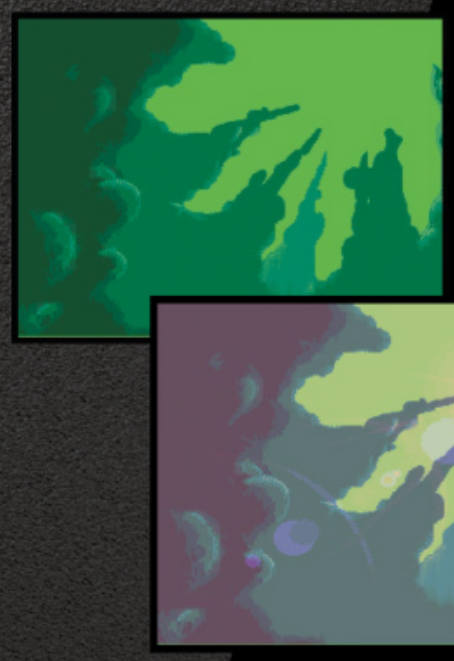
■ Another 16-colour layer, this one hosts the foreground and constantly refreshes as Jim moves through the stage. Although this stage doesn't use this effect, it's possible to set priority for individual tiles so that they draw above Jim – useful if you want to show him walking behind a piece of scenery, for example.

OBJECT LAYER

■ This is where the sprites live, like enemies, items and Earthworm Jim himself. If it moves around freely or requires lots of animation, this is probably where it's being drawn. In *Earthworm Jim* the HUD is also displayed on this layer, freeing the developers to use the three background layers to their full potential.

LAYER 3

■ Although it doesn't appear as such in the game, this is the lowest priority layer – the one which everything else draws on top of. It uses four-colour palettes, hence the limited detail on the mountains. Because this is the least-capable layer, many games use a priority mode that sets it to instead draw at the front, as a HUD.



LAYER 2

■ This layer appears to be the furthest background layer, but in truth it is drawn in front of Layer 3 and adds to its colour using the system's colour-blending features. The layer uses 16-colour palettes and doesn't scroll, though it can. The effect might look odd here due to the dark palette, but once the layers are blended the addition works.

SUPER NINTENDO ENTERTAINMENT SYSTEM

WOULD YOU LIKE CHIPS WITH THAT?

THE ENHANCEMENTS THAT PUSHED GAMES BEYOND THE LIMITS OF THE SNES

DSP-1

■ This digital signal processor was the first of the SNES enhancement chips, introduced with *Pilotwings* in 1990. It was used in 15 games – all of them Mode 7 games like *Super Mario Kart*, where it helps with the required 3D mathematical calculations.

SUPER FX

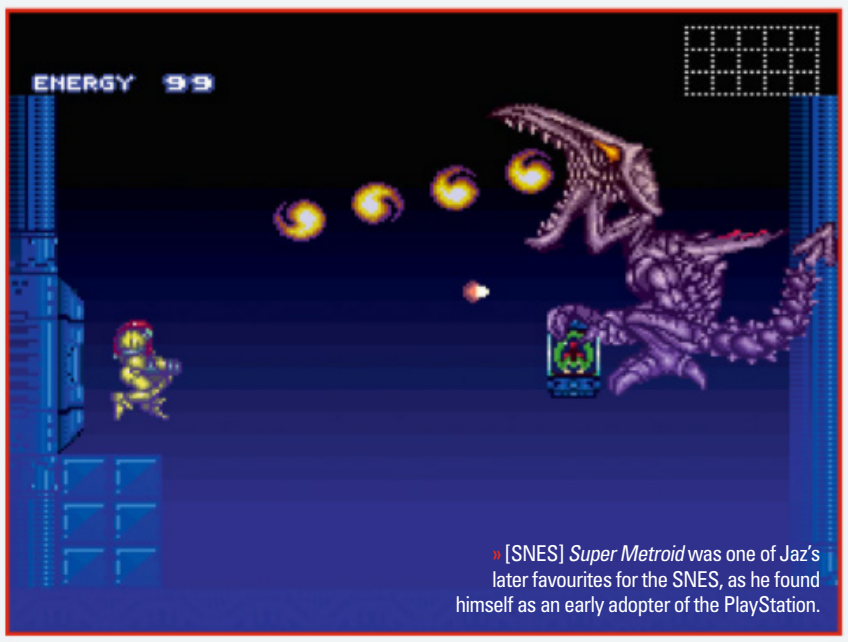
■ The most famous SNES enhancement chip was only used in eight games. Most of them used it primarily for drawing polygonal graphics, but *Yoshi's Island* also used the updated Super FX 2 for sprite operations including rotation and scaling.

Photo by Dark Zero

CX4

■ Capcom introduced this custom hardware in 1994 with *Mega Man X2*. The chip is best known for its role in helping the game to display wireframe graphics. After its second appearance in *Mega Man X3*, it was never used again.

» [SNES] *Super Mario World* comfortably outclassed its NES predecessors while leaving plenty of room for the console to show growth.



» [SNES] *Super Metroid* was one of Jaz's later favourites for the SNES, as he found himself as an early adopter of the PlayStation.

▶ decompression takes time. If you look at when you start a new level of *Earthworm Jim* on the SNES and the Genesis, you'll see that the levels start in about half the time of the SNES. That is a direct indication of the limits of the SNES processor right there."

The relative weakness of the CPU combined with a quirk of the graphics hardware to cause strain. "Another weak point was how hardware sprites were drawn," Nick says. "They were limited to two sizes of your choice. Most people went with the sizes 8x8 pixels and 16x16 pixels. So if you wanted to draw a moving image, such as your main character, you had to set up *lots* of smaller sprites to make up the bigger image. It doesn't sound terribly limiting but on a machine that was underpowered, and you're trying to draw lots of moving things on the screen, it did consume a lot of the processor power, too. On the Genesis, you weren't limited like this at all. You could have any variety of sizes from 8x8 pixels up to 32x32 pixels with all combinations in between. So the SNES had more work to do with a processor that was nowhere near as powerful." This meant that the system struggled with fast action games and those that threw around plenty of sprites, leading to slowdown in games like *Super R-Type* and *Gradius III*.

Of course, running up against the limitations of its own hardware design was something that Nintendo was well-prepared for. In the previous generation, Nintendo had commonly supplemented the hardware performance of the NES by placing additional hardware on the cartridge, in the form of chips commonly known as 'mappers'. The SNES was capable of exactly the same trick and a number of chips would be created over the life of the console, used by dozens of games, the most famous of which was Argonaut's Super FX. The processor allowed the SNES to generate 3D polygon graphics at a sufficient speed to support action games, as seen in *Star Fox* and other games, which was quite a marketing coup in 1993. But the very first game to use such a chip was *Pilotwings* – the game that had previously been shown off as *Dragonfly*, now retooled back to the original flight simulator concept – and it sported a much more appealing look than those early demos as a result.

***Pilotwings* was one of the earliest games to make heavy use of the console's most renowned graphical feature, Mode 7.** "The Mode 7 playfield, that allowed you to project the playfield in 3D, was probably the most positive thing on the SNES. I can't even tell you how many hours I poured into *Super Mario Kart* with its use of Mode 7 to draw the '3D' track. I don't think I've ever put so much time into any game, period," says Nick. Chris is intimately familiar with the feature, as he developed the fondly remembered multiplayer racer *Street Racer*. "Mode 7 was such a unique feature that really made some amazing games possible on the SNES. It was designed to allow zooming and rotating of the screen, but you could also do that per scanline – so by changing the matrix used on each line you

SA-1

■ The 'Super Accelerator' was introduced in 1995 and was the most used enhancement chip, appearing in games such as *Kirby's Fun Pak* and *Super Mario RPG*. It houses a 65C816 CPU core running at 1074MHz – triple the speed of the 5A22.

Photo by Pmt7ar

S-DD1

■ This chip was introduced in 1996, and only used for two games – *Star Ocean* and *Street Fighter Alpha 2*. Both games had to heavily compress sprite data to fit onto their cartridges, and this chip was used to alleviate the burden of data decompression.

» [SNES] By the end of the system's life, the SNES was hard-pushed even with conversions of 2D arcade games.

» [SNES] Even Nintendo faced the limitations of the SNES, though *Mario Kart* was hardly an unwelcome result of that.

could make it look like the screen went into the distance, and therefore make driving games possible. The calculations were quite intensive for each scanline, though, and used up a lot of CPU time pretty quickly," he tells us. "Games like *Mario Kart* had custom extra processors to handle that maths so it wasn't a problem."

With that in mind, it's not a surprise that a Mode 7 game was the first to cause Nintendo a problem, but the console's most renowned special effect wasn't just a workout for the CPU – it was tough to design around. The Mode 7 tilemap was limited to a size of 128x128 tiles, drawing from a maximum of 256 unique 8x8 pixel tiles. This could be fudged by constantly updating the tilemap, but it wasn't a universally applicable solution, as Nintendo found when it tried to create a multiplayer version of *F-Zero*. "To have a split-screen in *F-Zero* would require rebuilding the 128x128 map for each half of the screen depending on where each player was in the world, and that just wasn't doable in the raster time," Chris tells us. In **RG167**, Nintendo's developers revealed that their solution was to slow the game down to work within the 128x128 limit, ultimately resulting in a change of focus that led to the creation of *Super Mario Kart*. Chris ultimately took the same approach. "In *Street Racer,* we just used maps that were 128x128 like *Mario Kart*, so split-screen was just a case of calculating the view matrices for each line which you are doing anyway." Playfield size wasn't the only limitation, either. To achieve the kind of scrolling background graphics on the horizon as seen in games like *Street Racer* and *Super Mario Kart*, it was necessary to switch modes mid-frame during horizontal blanking, as Mode 7 only allowed for a single background layer to be drawn.

But while it was possible to add extra chips to make up for the console's weaknesses, it wasn't always practical. "For *Street Racer* we could not use any extra CPUs as it added too much cost, so we had to come up with a way of doing the same thing but doing it a lot quicker," says Chris. "Nick Jones started the work on that but then went to work for Shiny in the States, but I took what he did and adapted it and changed it to give a better perspective and sped it up a bit so we could get the same look as *Mario Kart* but for a fraction of the CPU usage. That then freed up enough CPU time to have bigger cars on screen.

"Not long after *Street Racer* came out Mev [Dinc, Vivid Image founder] was asked to visit Nintendo to show them *Street Racer*, and when he got back he said they could not believe that we did what we did with no extra processors on the cart. So that is something I am proud

> "FOR STREET RACER WE COULD NOT USE ANY EXTRA CPUS AS IT ADDED TOO MUCH COST, SO WE HAD TO COME UP WITH A WAY OF DOING THE SAME THING BUT DOING IT A LOT QUICKER"
>
> CHRIS WEST

» Quality arcade ports like *Street Fighter II* supplemented Nintendo's wave of first-party games.

SUPER NINTENDO ENTERTAINMENT SYSTEM

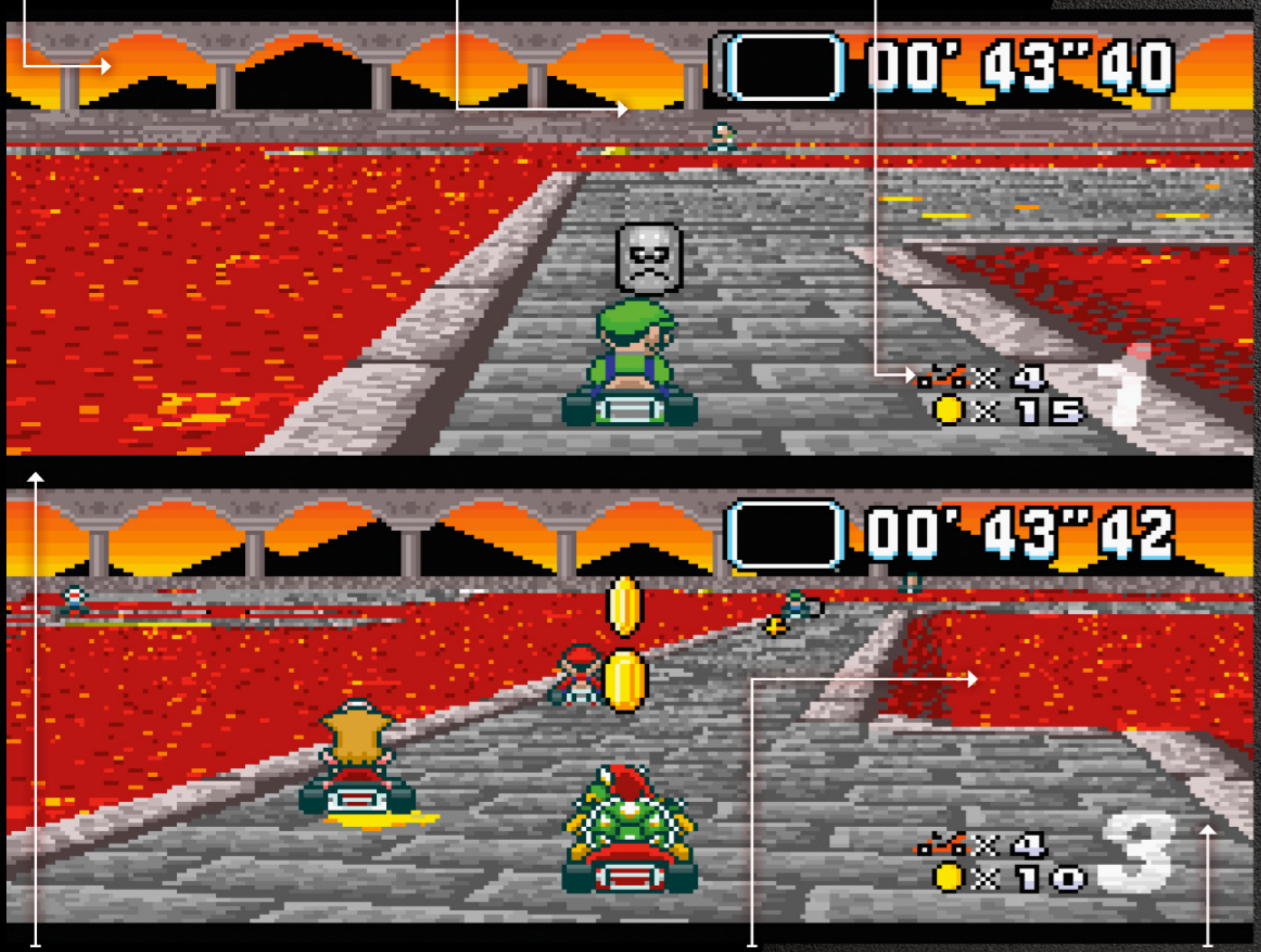
SEVENTH HEAVEN

HOW CLEVER PROGRAMMING MADE MODE 7 MORE THAN JUST A NEAT GRAPHICAL TRICK

1 This top part of the background doesn't use Mode 7 at all, instead using one of the more capable background layers.

2 At this line, the SNES switches modes to begin drawing the Mode 7 background layer in all of its rotating, scaling glory.

3 Since Mode 7 only allows for a single background layer, HUD elements like counters are drawn to the screen as sprites.



4 This thick black line is drawn to give the SNES enough time to revert modes and set up the second player's screen.

5 The transformation matrix for the Mode 7 playfield has to be altered every line in order to simulate perspective effectively.

6 The level is limited to a single playfield's size, as it's impossible to refresh the Mode 7 tile map for player two's screen.

"THE MODE 7 PLAYFIELD, THAT ALLOWED YOU TO PROJECT THE PLAYFIELD IN 3D, WAS PROBABLY THE MOST POSITIVE THING ON THE SNES. I CAN'T EVEN TELL YOU HOW MANY HOURS I POURED INTO SUPER MARIO KART WITH ITS USE OF MODE 7 TO DRAW THE '3D' TRACK. I DON'T THINK I'VE EVER PUT SO MUCH TIME INTO ANY GAME, PERIOD"

NICK JONES

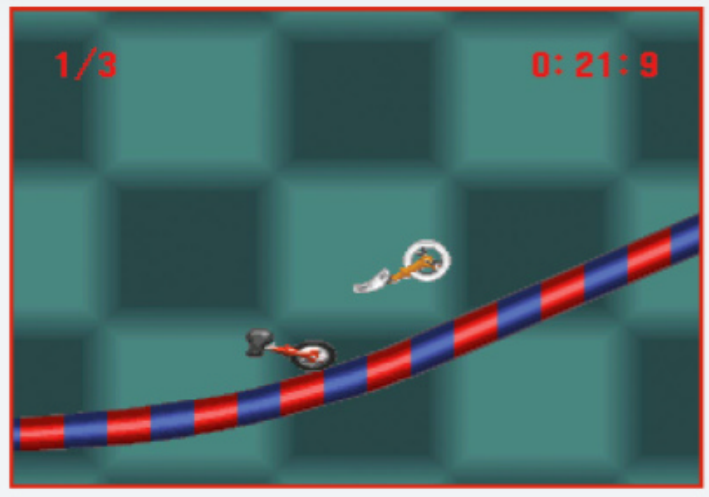
to have done, something that the people who built the hardware didn't think was possible." That wasn't the only technical achievement that *Street Racer* showcased, either. "I was also very happy that we had the first four-player game of its type on any console, again something Nintendo just didn't think could be done," Chris continues. "That just came out of a bored evening of coding. I had just got the two-player mode working in the game and I just wondered if it was possible to push it any further, so I changed a few bits and got three players working, and then four. That was satisfying."

Despite being a technical marvel, the SNES didn't sustain the near-monopolistic dominance that Nintendo had enjoyed during the 8-bit era, but there was no way it could have done. Where the NES had been able to sweep into an open market that many had abandoned as a fad, this time it faced credible competitors that were able to take advantage of Nintendo's reluctance to retire its golden goose. It also faced increased regulatory challenges when it came to its relationship with third-party publishers, ensuring that it couldn't tie up the software supply for itself. But by waiting to see what the opposition had in store, Nintendo was able to deliver a technically superior console that allowed it to retain its position as the global market leader, despite a fierce challenge from NEC at home and Sega internationally.

This success undoubtedly influenced Nintendo's strategy for the future, so it ensured that the N64 was also the last of its generation to arrive on the market, in the interests of being the most powerful console. This left Nintendo reliant on the SNES to hold the fort against a variety of next-gen competitors, and it did an admirable job of this. Going into the 1994 holiday season, the Jaguar and 3DO were starting to see substantial software development and Sega was launching the 32X add-on for the Mega Drive. Nintendo was able to repel that triple threat with ease with *Donkey Kong Country*, developed in the UK by Rare. Using Silicon Graphics hardware, the company was able to prerender 3D visuals that looked convincing on the SNES giving the game an incredible look. "I remember seeing it for the first time and being very impressed by it," says Jaz, who by this point was working for Virgin Games. "A lot of clever neat graphical tricks to make them look 3D and really give the graphics depth and detail, and they were fun to play – albeit difficult. It helped maintain excitement for the system, even when there were things like the PlayStation emerging." Millions of copies were sold, and doubtless plenty of SNES consoles with them.

Rare would continue to use its 'Advanced Computer Modelling' technology in *Donkey Kong Country*'s two sequels in 1995 and 1996, as well as the arcade game *Killer Instinct* which saw a SNES port in 1995. However, other games in this late period saw the console become increasingly reliant on the use of the Super FX and other enhancement chips to keep up with the competition – in 1995 alone, more games used them than had done in the first four years of the console's life. One such game was *Doom*. "I was working independently on my own 3D engine called 'RAGE' (or 'Reality Engine') that was designed for the Super FX chip and realised I could write conversion tools which processed *Doom* data into the format required by my engine," says Randy Linden. "After a few months of development, I had enough of the game operational as a proof-of-concept demo. I showed the prototype to Sculptured Software who then brought the demo to id Software, who were very impressed with what I had accomplished and gave us the go-ahead to complete the game."

» [SNES] The SNES couldn't rotate sprites without help – *Yoshi's Island* here uses the Super FX 2 to do so.



» [SNES] The slow CPU didn't mean universally slow games – *Unirally* moved at a pace that could easily overwhelm newcomers.

All of the new consoles could run *Doom*, so for the venerable SNES to do so was quite a coup. However, the truth is that a stock SNES would not have come close to running the game, given how heavily the engine relied on that enhancement chip. "The RAGE game engine runs approximately 95% on the Super FX 2 chip and 5% on the regular SNES 65816 hardware. The Super NES 65816 handles DMAs, graphics transfers, interrupts, reading the joysticks etc, but the actual game runs on the Super FX – this includes things like visibility determination, collision detection, object movement and enemy AI, plus all the drawing of the graphics is done on the Super FX side as well," says Randy. Of course, that had a cost associated with it – when the game hit the UK market, it was a remarkable £64.99. "At the time *Doom* was released, it was the second-most expensive cartridge available! The only thing which would have increased the cost of the individual hardware units would have been to add a battery for save games," Randy continues. "The publisher, Williams, went to great lengths to make *Doom* for the SNES a very special game and that's why the cartridge itself was red instead of the usual grey colour."

> "AT THE TIME DOOM WAS RELEASED, IT WAS THE SECOND-MOST EXPENSIVE CARTRIDGE AVAILABLE! THE ONLY THING WHICH WOULD HAVE INCREASED THE COST OF THE INDIVIDUAL HARDWARE UNITS WOULD HAVE BEEN TO ADD A BATTERY FOR SAVE GAMES."
>
> RANDY LINDEN

The SNES was coming to the end of its life, and by 1996 there was no disguising it. It had no hope of competing with the 3D consoles, even with the Super FX, and it was beginning to lose pace with 2D games. By the middle of the year the N64 swept in to give the SNES a well-deserved rest, and would define gaming in its own unique way. But that's a story for another time – what matters is the legacy of the SNES, a console that proved the success of the NES was no fluke, and that Nintendo would not relinquish its crown easily. Much more than with most other consoles, the decline of the SNES marked the true end of an era.

"To me, things like the PlayStation represent the first consoles of the modern era – 3D graphics, CD technology – it was a considerable step ahead of the SNES and the Mega Drive. To me they represent the end of that cartridge-driven era," says Jaz. "I look at the SNES as being a real defining moment in gaming, in terms of its 16-bit legacy. It didn't bring a lot of new ideas to the table, but it did refine and establish games designs. Platform games, shoot-'em-ups, in particular RPGs – those more traditional games, it took those and brought those to a pinnacle that hasn't ever been beaten, because there just isn't anything out there that can compete with that very definition of 16-bit gaming. I think that's why it's so well-loved – it represents an era that people copy, but it's something that won't ever be recaptured." We can't agree more, and if there's one thing we'd bet on in the retro gaming world, it's that 30 years from now, the likes of *Super Mario World* and *F-Zero* will still be seeing regular play.

THE MAKING OF DOMINOS

Nokia phones may have brought it to the masses but Snake existed in a different skin way back in the Seventies. Programmer Dennis Koble shares the twisted tale of Dominos

WORDS BY PAUL DRURY

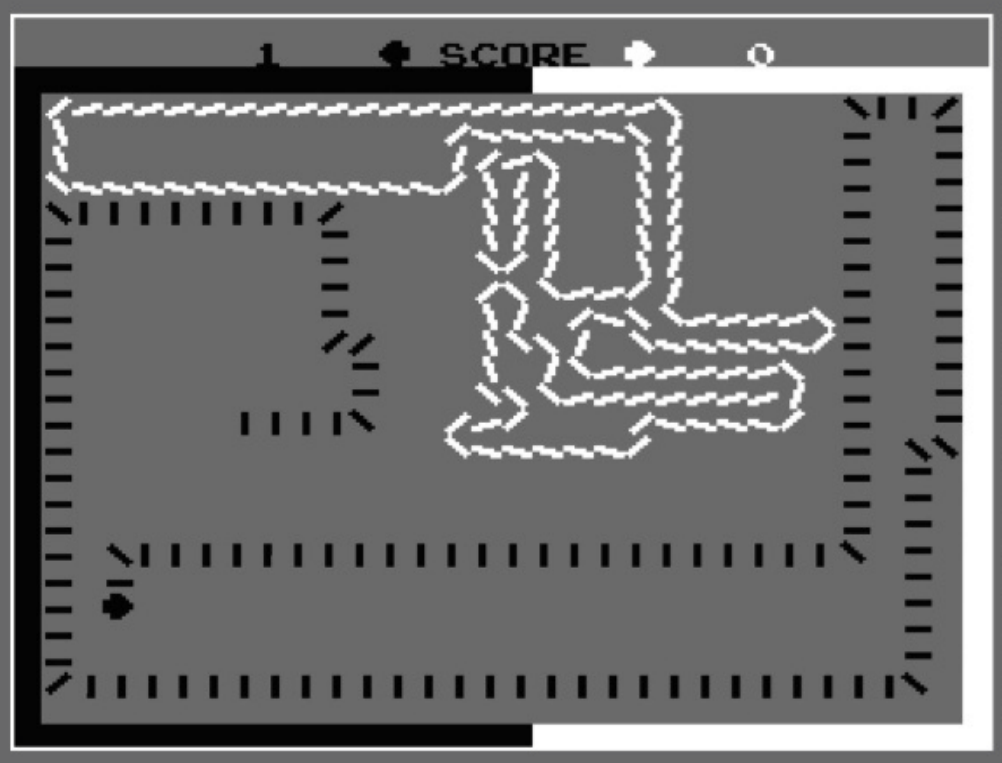
IN THE KNOW

- **» PUBLISHER:** ATARI INC
- **» DEVELOPER:** ATARI INC
- **» RELEASED:** 1977
- **» PLATFORM:** ARCADE
- **» GENRE:** SNAKE DUEL

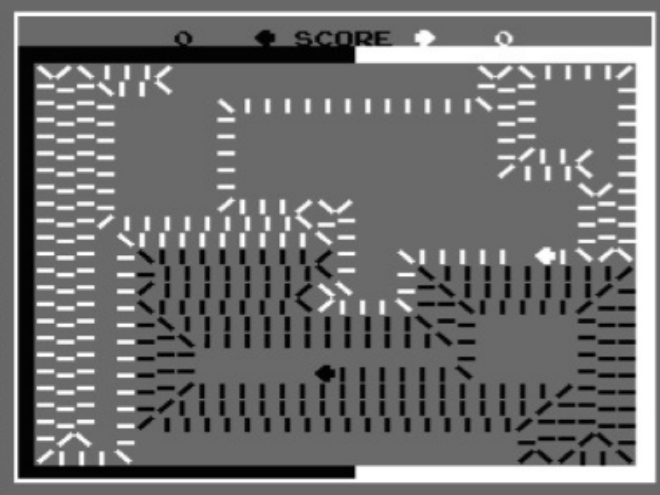
"When it comes to *Dominos*, my memory is spotty," begins Dennis Koble, who can code as well as he puns. "It was done in 13 weeks, start to finish, which was quite remarkable even in those days. Games typically took six months to develop so that was pretty darn short. Everything about the project was designed to be quick!"

Dennis had joined Atari in 1976 as only its fourth programmer and had been assigned to work with two colleagues who would become lifelong friends: Lyle Rains, vice president of engineering, and technician Dan Van Elderen, who eventually became president of Atari Games. Their first project was *Sprint 2*, a slick overhead racer that performed well in arcades, so understandably they stuck with this proven hardware for their next game – and with a proven game concept, too.

"Gremlin had come out with *Blockade* the year before, which was very popular, a really hot game, and Atari wanted their version – and fast," admits Dennis. "I do recall that was a little unusual for Atari. A few years after this, they became an extremely high-quality coin-op division, the Cadillac of the industry, but in the mid-Seventies, they were still a pretty young company and just trying to survive as they made the transition into using microprocessors [in their games]. They didn't quite have the standards they developed later..."



» [Arcade] To paraphrase The Style Council, 'White is out, tiles come tumbling down.'



» [Arcade] Lengthy *Dominos* battles can see the screen almost full of tiles.

To be fair, Atari wasn't the only company copying Gremlin. Ramtek and Meadows Games produced their own clones (see 'The Year Of The Snake') soon after *Blockade*'s release and anyway, *Snake* had been around on mainframes since at least the early Seventies. "The game was out there," says Dennis. "I know there were versions of *Snake* on ARPANET and CompuServe [precursors to our modern internet], which is why I didn't have too many qualms about doing our version. We didn't feel like we were stealing Gremlin's idea. It was in the public domain and they were just the first to bring it to a coin-op machine."

And Atari did bring its own style and business nous to the established formula. There is the lovely graphical flourish when you steer your ever-growing line of tiles into a dead end and watch them topple, recalling those domino-fall world record attempts invariably overseen by a grinning Roy Castle. The sound effects follow the 'quickening heartbeat' school of tension-building a year before *Space Invaders* made us all intensely aware of our own pulses, and the cabinet itself is a thing of beauty. "We had a wonderful art department that was set up just after I joined Atari," recalls Dennis with a smile, "and one of the key guys

DEVELOPER HIGHLIGHTS

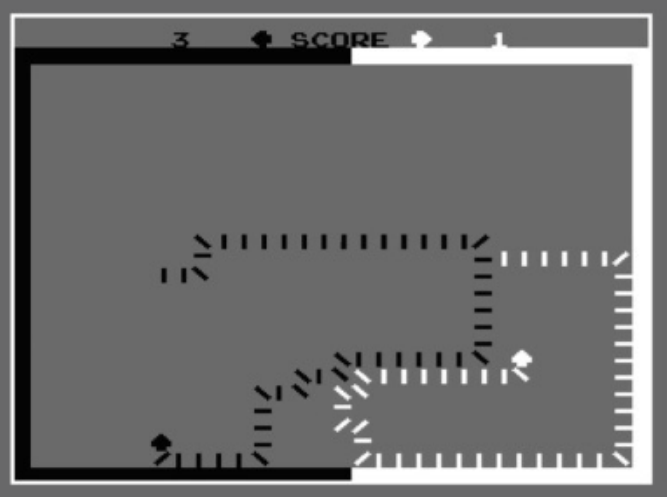
TRICK SHOT
SYSTEM: VARIOUS
YEAR: 1982

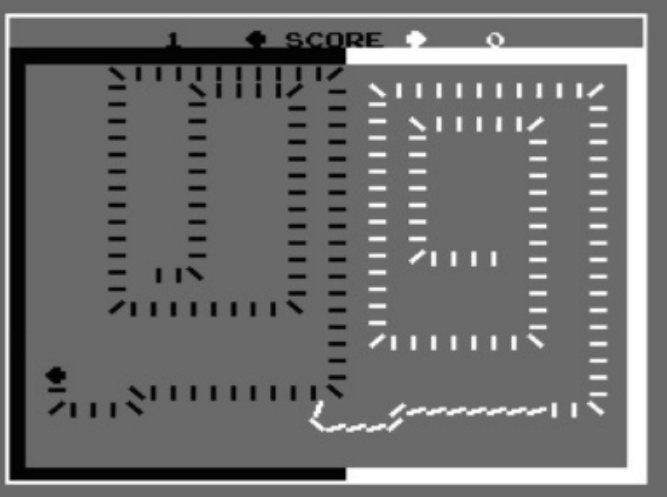
PGA TOUR GOLF
SYSTEM: VARIOUS
YEAR: 1990

PIT-FIGHTER (PICTURED)
SYSTEM: VARIOUS
YEAR: 1990

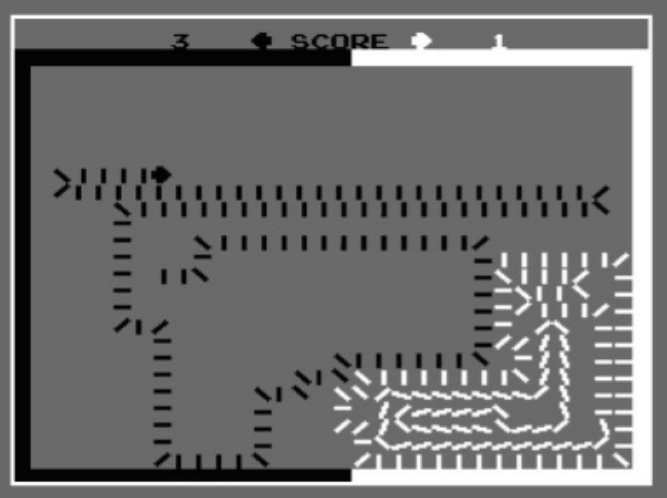
"AT ATARI, IT WAS A REQUIREMENT OF THE JOB TO PLAY THE GAMES BEING MADE. WE HAD EPIC BATTLES ON ALL OUR MULTIPLAYER TITLES"
DENNIS KOBLE

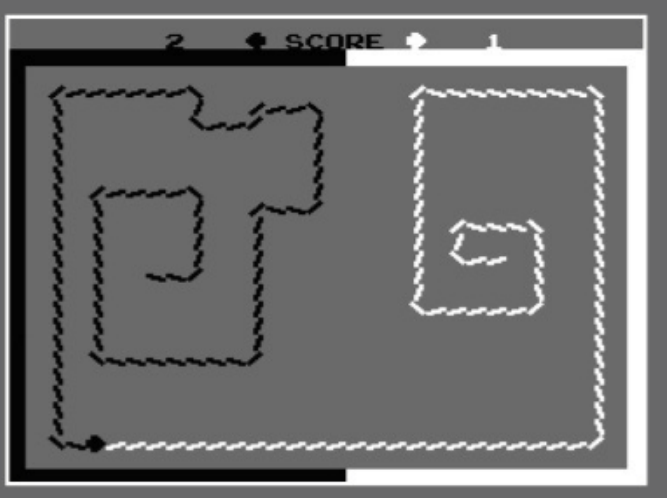
» Dennis Koble, programmer of *Dominos*. See **RG 107** for more on his long and illustrious career.





» [Arcade] 'Dirty dancing in the moonlight, take me down like I'm a domino…'

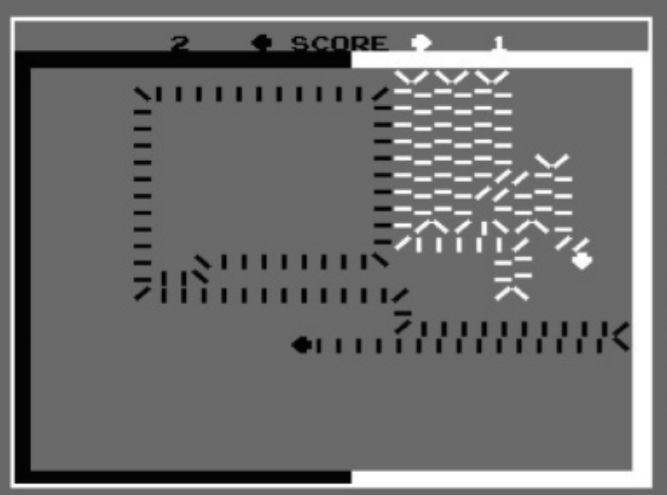




» [Arcade] A head-on collision sees both players fall in sync.

was Bob Flemate. He was an outstanding artist and I'm pretty sure the marquee and cabinet art is his work."

Most significantly, though, Dennis' game added in the option to play against a computer-controlled opponent. Whereas *Blockade* and its imitators required two to four players, *Dominos* did have a single-player option, something still quite novel for a head-to-head game in the mid-Seventies. Was the AI a challenge to code, we ask? "I'd love to take the credit," Dennis laughs. "I'm listed as the programmer and people associate that with designing the game, which largely became true soon after, but Lyle Rains was the brains on this game. He suggested the concept, drew the graphics and he created the AI. He told me his thoughts and I coded them. To be honest, I don't recall anything too difficult to code with *Dominos* but then I was young and smart and hadn't lost half my brain cells at that point."



» [Arcade] Black has managed to confine white to the top-right corner and now it's only a matter of time…

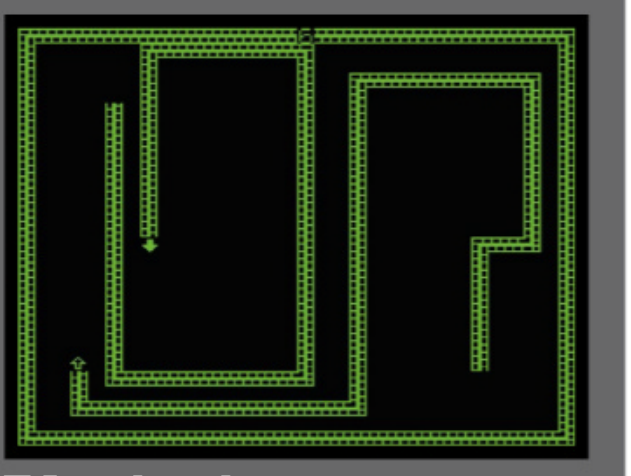
Dennis did a decent job of getting your computer rival to lay tiles around the playfield, though it's hardly the *Jungle Book*'s Kaa in terms of guile. Besides, a human opponent is always better and there is a lovely rhythm to *Dominos* when played competitively. It begins with a game of chicken, a question of who will swerve first to avoid a collision, and then there's a jostling for position, until you each find yourself trapped in your own section of the screen. Then it becomes a battle for survival, as you wriggle to make best use of your ever-decreasing space, desperately hoping your adversary will reach a dead end before you do. Were there hard-fought duels with Atari colleagues during development, we ask?

"Oh yes," Dennis assures us, "my gosh, that was a tradition at Atari. A requirement for the job was that you spent as much time as needed, which might be a few hours a day, playing the games being made. You'd play other people's games and if your game needed two players, you'd get other people in the department to play yours. We had epic battles on all these multiplayer titles – *Tank 8* was always a favourite. It was a strength of Atari. We truly did playtest our games extensively before they went to market."

It shows. Despite the simple concept and black-and-white graphics, *Dominos* stands up to competitive play, its purity and instant appeal is alluring today as it was in 1977. It inspired the Atari 2600 game *Surround* and reappeared the following decade as the light cycles level in the arcade hit *Tron*. So next time you come across a *Snake* clone, remember it has a tail that stretches back to the Seventies. ✱

THE YEAR OF THE SNAKE

1976 SAW THREE SNAKE GAMES SLITHER INTO THE ARCADES

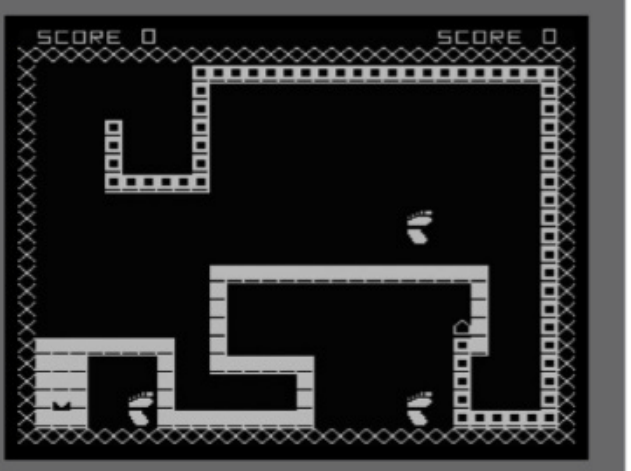


Blockade

■ Gremlin was first to market and had great success with its coin-op, which pitted two ever-growing luminous green snakes in a duel to the death.

Barricade

■ Ramtek had a reputation for swift knockoffs ever since its multiple clones of *Pong* at the start of the decade. This version does allow up to four players, though.



Bigfoot Bonkers

■ This brilliantly titled version from Meadows Games adds giant footprints as obstacles on the playfield and has sasquatch tracks all over the cabinet, too.

THE MAKING OF KNIGHT TYME

Besides being arguably the best Magic Knight adventure, Knight Tyme was also the most ambitious Spectrum 128K launch title. David Jones tells Retro Gamer how he created his epic sci-fi classic

WORDS BY RORY MILNE

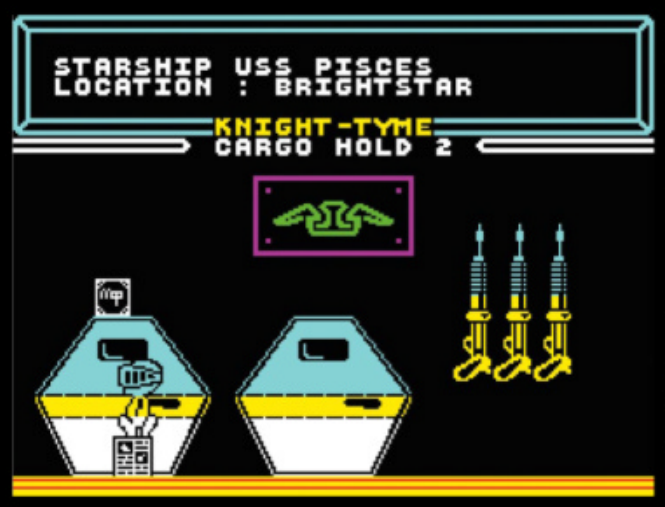
IN THE KNOW

- **PUBLISHER:** MASTERTRONIC
- **DEVELOPER:** DAVID JONES
- **RELEASED:** 1986
- **PLATFORM:** ZX SPECTRUM, VARIOUS
- **GENRE:** ADVENTURE

The Spectrum 128K didn't become available in Britain until early 1986, but the new computer was made available to some UK publishers a few months earlier. Most commissioned enhanced versions of existing titles for the unproven system, but budget specialist Mastertronic asked David Jones to design a game that would showcase the new machine's capabilities, as the former developer remembers. "I'd already started on *Knight Tyme* as a 48K game," David says of his Spectrum 128K launch title, "then someone at Mastertronic said, 'Here's the new version of the Spectrum. Do you want to write your next game on it?' So I said, 'Yeah, okay.' I was still earning quite good royalties from *Finders Keepers* and *Spellbound*, and to me this was something that would be fun."

Given the Spectrum 128K's advantages, David could have put *Knight Tyme* on the back burner and designed a fresh concept for Sinclair's new system, but he opted to continue the Magic Knight's menu-driven adventures on the more capable computer. "There was no point in inventing a brand-new character for a machine that didn't have any sales yet," David reasons, "and from the reviews I was getting, I was very confident that *Knight Tyme* would sell. Largely, I was writing the sort of game *I* wanted to play. I always liked adventure games, but having to work out which words to use seemed somewhat primitive. Having a menu system that showed you options allowed you to give commands as if you had typed them in, but without having to guess the words."

But rather than making *Knight Tyme* a pure arcade-style adventure, David added a few platforms to his spaceship-set sequel, although unlike its predecessor, *Spellbound*,



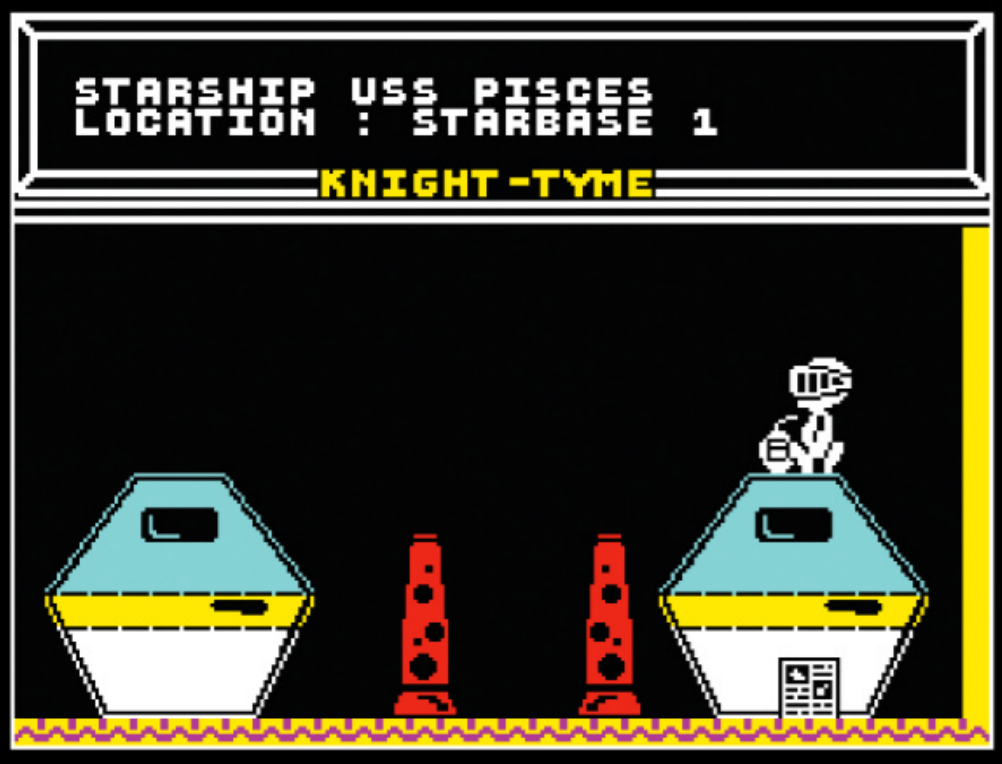
» [ZX Spectrum] The advert in *Knight Tyme* isn't just a shameless plug; you can use it to reach high-up places.

DEVELOPER HIGHLIGHTS

FINDERS KEEPERS
SYSTEM: ZX SPECTRUM, VARIOUS
YEAR: 1985

SPELLBOUND
SYSTEM: ZX SPECTRUM, VARIOUS
YEAR: 1987

STORMBRINGER (PICTURED)
SYSTEM: ZX SPECTRUM, VARIOUS
YEAR: 1987



» [ZX Spectrum] The locations you beam down to in *Knight Tyme* are often where you find essential items.

» David Jones works at the Breda University Of Applied Sciences and is writing a sci-fi book called *Booting Ada*.

"NOT ONLY DID YOU HAVE TO MAP THE ROOMS, BUT YOU HAD TO MAP THE STARS AND HOW THEY CONNECTED FROM ONE TO ANOTHER"
DAVID JONES

he connected his follow-up's platforming to its overall objective. "I still put a few bits of platforming in *Knight Tyme*, where you had to jump on objects to jump onto other things, but not in a pointless platform-y kind of way," David explains. "I didn't think I'd done platforming to death, but I also didn't see any great challenge in putting a bunch of random platforms in a spaceship."

More appropriate by far were the robotic characters that David equipped his sci-fi adventure's spaceship with, which he decided should be more helpful than their human counterparts. "I was thinking in terms of the robots *appearing* in some ways alive," David ponders, "but they were actually machines made by people and put on the spaceship for a particular reason, so they would be more likely to obey your commands, because that's what they were built for."

One trait that *Knight Tyme*'s characters would share, however, was that they didn't need to be looked after by the player, which David felt was fair given the grand scale of his follow-up. "I thought looking after the characters in *Spellbound* was one of the hardest bits," David considers, "and there was enough challenge from working out things in *Knight Tyme*, because not only did you have to map the rooms, but you had to map the stars and how ▶

» [ZX Spectrum] Vital information is stored on some of *Knight Tyme*'s objects, like the game's wrist terminal.

GUIDE·TO·KNIGHT·TYME

How to get the Magic Knight back from the future

ARE FRIENDS ELECTRIC?

■ Until you get a valid ID, *Knight Tyme*'s human crew won't help you, but you need their assistance to make progress. The solution is to order the game's droids and ship computer to produce the required identification, as they're programmed to obey you – even if you give them suicide missions.

FIRST PRINCIPLES

■ Much of *Knight Tyme* involves travelling between planets and beaming down to their surfaces, but before that you have some basic chores to do. The pilot of the spaceship you're on needs a starmap, he demands certain objects and can require an energy boost. You also have to fix the ship's teleporter.

STAR TREK

■ The starmap in *Knight Tyme* is split down the middle, with one planet acting as a chokepoint that you have to visit to get from one side of the map to the other. The problem is that it has orbital defences to fend off pirates, both of which you have to speed past without using too much fuel.

BEAM ME DOWN

■ As much fun as it is zipping around the galaxy, there's a point to *Knight Tyme*'s star trekking. The idea is that you teleport down to planets in search of useful items and helpful characters. That said, not all of the worlds are friendly, so talk to their inhabitants before beaming down.

PREVENTIVE MAINTENANCE

■ With the exception of *Knight Tyme*'s AI characters, everything in the game requires maintenance. Our hero – Magic Knight – and other humanoids, need to keep up their strength, either with futuristic fast food or a 'fortify' spell, and their ship regularly needs to be refuelled and serviced.

CONVERSION CAPERS

Which is the best version of the sci-fi adventure?

ZX SPECTRUM 128K

■ Although the original has less platforming than its predecessor, *Spellbound*, it has more sophisticated and satisfying challenges. It's much bigger than the previous adventure, and it adds voyages through space and beaming down to planets to the mix. It also has lively medieval in-game music.

ZX SPECTRUM 48K

■ The stripped-back 48K *Knight Tyme* uses the same visuals to depict every planet but has less locations to visit, which results in the game's items being far less spread-out. The 48K iteration also suffers from colour bleed, like the original, and it lacks the 128K version's three-voice tune.

▶ they connected from one to another. And then in some of those locations that you could beam down to, you had to map some bits of those as well. So there were plenty of things for people to do."

But despite its emphasis of exploration, David wanted *Knight Tyme* to incorporate task maintenance, although he restricted this aspect of his game to its spaceship. "It was partly coming down to not looking after the individual characters," David says, "in that you got one spaceship to look after rather than lots of other people. So it was a replacement maintenance task; you just weren't maintaining people."

Since the motivation for keeping *Knight Tyme*'s futuristic mode of transport operational was to be able to travel between distant planets, David hid objects on some of those worlds that were essential to making progress. "I wanted to have a bit more of a reason to go from planet to planet," David notes. "If all you had done was go to a starbase and refuel your spaceship then why bother going to the planets? But the way I linked the maps together, there were some places where you had to take a few hops, and if you went too fast you would use too much fuel."

In order to avoid confusion, running out of fuel in *Knight Tyme* would result in sudden death rather than being stranded, but David also positioned space pirates at the heart of his game's starmap to deter overly slow pilots.

"If the spaceship got into a position where it couldn't get fuel, and it couldn't move, then at least with instant death you knew [it was game over]," David observes, "you didn't waste five minutes thinking that something was going to happen. Then there was an area on the starmap where you could only get to the other half of the planets from a pinch point, and you had to get through there fairly quickly to get to the other half of the map."

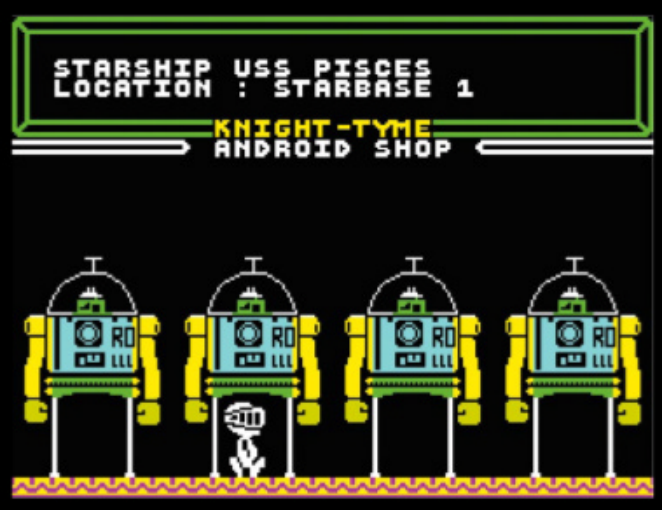
But while space pirates and starmaps were a natural fit for David's futuristic adventure, his game's medieval hero and his magic spells seemed slightly at odds with *Knight Tyme*. "Well the character was called Magic Knight, so you would expect him to be able to do some magic," David grins, "and Arthur C Clarke had been quoted as saying: 'Any technology that's suitably advanced looks like magic.' So *Magic Knight* might have just been using technology. Maybe someone came back from the future to ancient times and built 'magic' into his suit of armour."

> **"YOU DIDN'T NEED TO LOOK AFTER ALL OF THE CHARACTERS, SO I WANTED TO MAKE SOME OF THE PUZZLES A BIT MORE COMPLEX"**
> DAVID JONES

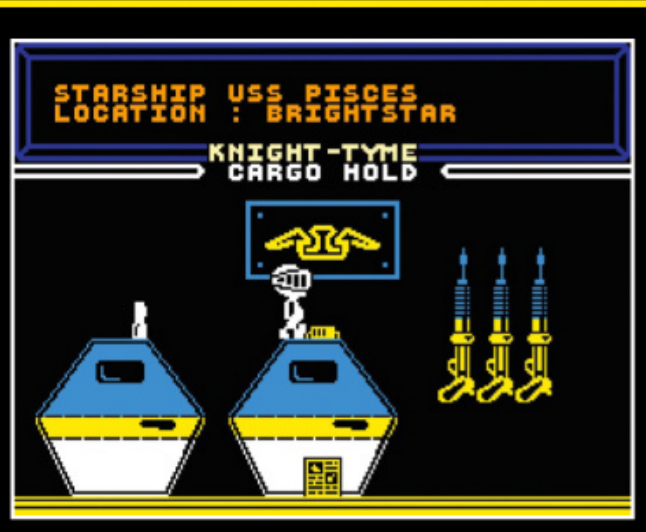
Whatever the reasoning for it, magic would be essential to solving some of the challenges that David devised for *Knight Tyme*, whereas the game's other puzzles would require players to find items to overcome sticking points. "I liked the idea of paired objects and obstacles," David reflects. "You'd work out what you had seen and what you had picked up, but if you saw a problem and hadn't seen the 'solution object' then at some point later on you would come across it and think, 'Oh, hang about! That would work with that earlier problem.'"

But rather than allowing the objects in *Knight Tyme* to be collected en masse, David limited the number that could be carried at any one time, which had the effect of rewarding careful planning. "Juggling objects was directly ripped out of 'two word' adventure games," David admits. "You only had a limited inventory, and so you had to temporarily get rid of an object that was going to be useful later, but then you would go back and pick up that object once you had solved a problem."

» [ZX Spectrum] Unlike its awkward human characters, *Knight Tyme*'s droids will give their lives to help you.

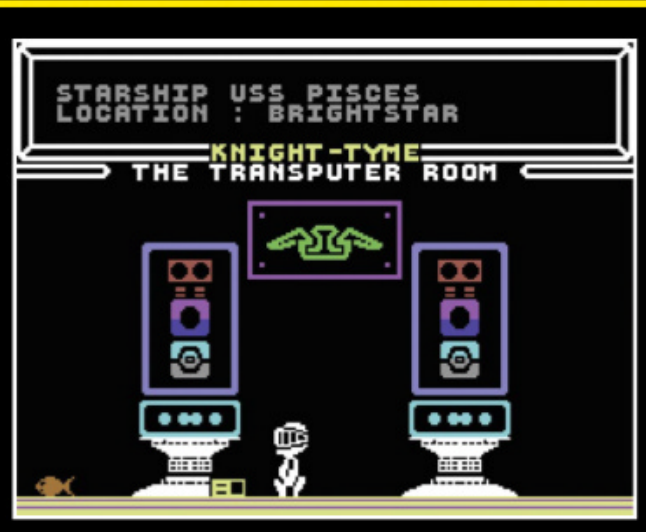


» [ZX Spectrum] Some of *Knight Tyme*'s locations have pretty visuals, but they are just for passing through.



AMSTRAD CPC

■ The CPC version of *Knight Tyme* sounds just like the original, but it plays like the 48K Spectrum version and has the same reduced number of locations. The other difference between the CPC port and its 48K Spectrum counterpart is that it's less colourful, although there isn't any colour clash.



COMMODORE 64

■ Arguably the second-best version of *Knight Tyme*, the C64 port has the same number of locations as the 48K Spectrum and Amstrad CPC variants, but it's more colourful and has nicer sound effects. Its only real failing is that it lacks the original game's soundtrack, unlike its CPC equivalent.

MSX

■ Like the C64 *Knight Tyme*, the MSX version is more colourful than the original but has less locations, and like the Amstrad port, it has no colour clash and includes the same playful tune as the Spectrum 128K game that it's based on. Its only flaw is that its menus are slower than the other iterations.

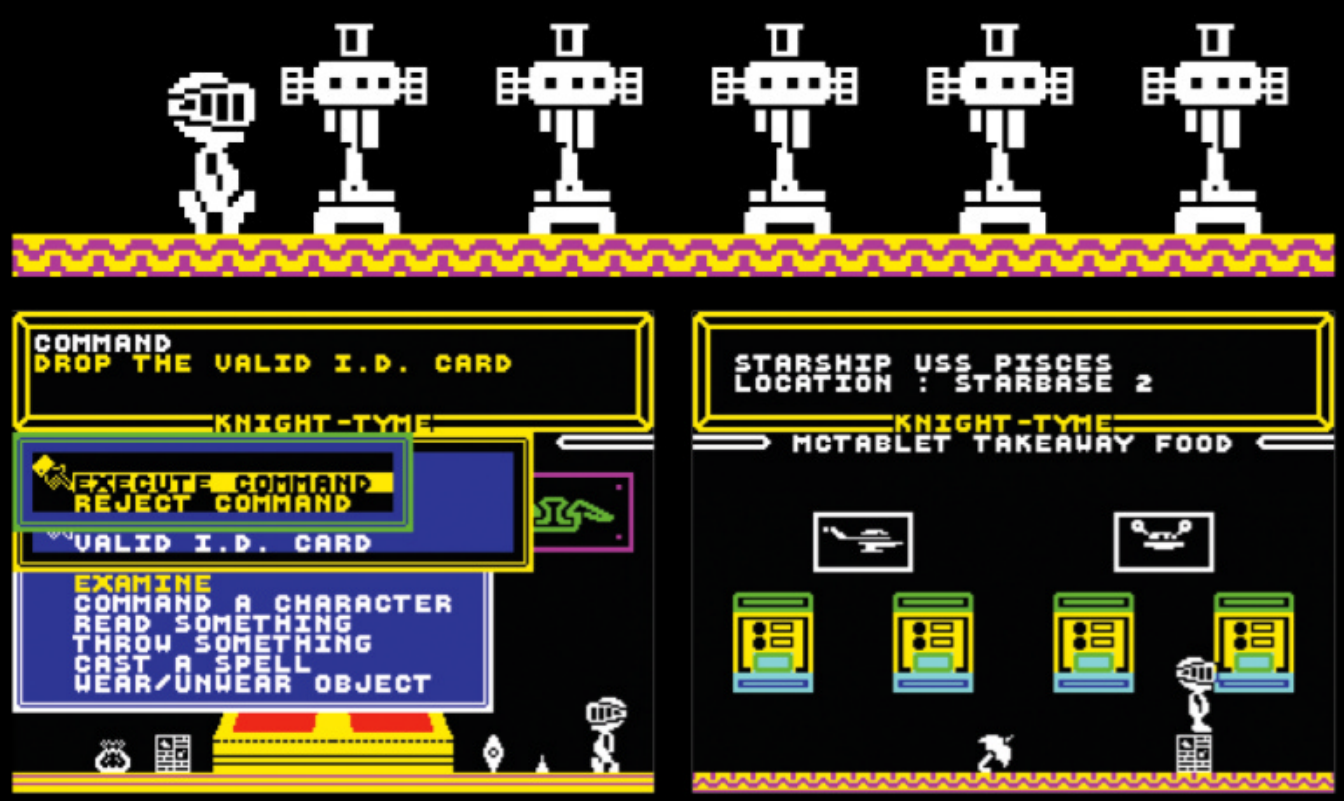
As well as backtracking to find cast-aside items, *Knight Tyme*'s challenge also incorporated multi-part puzzles based on assembling magic artefacts, which David added to raise his latest adventure's difficulty to the same level as his previous one. "I knew I was making *Knight Tyme* a little bit easier, because you didn't need to look after all of the characters," David concedes, "so I wanted to make some of the puzzles a bit more complex. I wanted to make sure there were definite challenges in there."

One definite challenge that David came up with was disguised as a helpful hint, but in actual fact it was a trap for unwary players. "I remember a particularly mean problem with the teleporter in *Knight Tyme*!" David laughs. "You had to put in X, Y and Z coordinates to go where you wanted to go, and with one of them I'd given the clue of what the coordinates were as Z, Y, X. So people just wrote the numbers down, and then when it came to put them in they got it wrong and ended up burst apart in space or something!"

But while David's wicked sense of humour was noted by excited reviewers on *Knight Tyme*'s release, the aspect of his adventure that they raved about was that it showed off what the Spectrum 128K was capable of, unlike the system's other launch titles. "Well obviously I was pretty pleased," David enthuses. "I'd had fun doing it, and I'd been able to make a bigger game than I could have otherwise. I was actually quite surprised that most of the other companies had just added a bit of music and some extra rooms, but I hadn't really given that a lot of consideration. I thought I was up against a whole bunch of people coming out with brand-new games, but other companies waited to see if the Spectrum 128K caught on before they bothered writing for it."

The original Spectrum was the more popular machine, however, and so David stripped back *Knight Tyme* to make it fit the system's smaller memory, with little or no thought given to splitting his sprawling adventure into two loads. "I never liked multiload," he says. "It seemed like a horrible idea, and if you had used it for a game where you could go into any part of it at any time then people would have just gotten totally pissed off. So what I did was compress all of the text and did some compression of some of the graphics. I reduced the number of planets you could go to, then because I'd knocked out some planets, I knocked out some of the bits you could beam down to, but I kept the essential elements of the game in there."

Assessing his spacefaring adventure game decades later, David offers improvements he would make with hindsight, but he considers *Knight Tyme* to be his best Magic Knight adventure, and the one that he's most fond of. "I would try to do twice as big a map than I had for the stars, and I would have the characters walking around," the developer muses, "but *Knight Tyme* is still my favourite of the Magic Knight trilogy that came out after *Finders Keepers*. Technically it's the best one, because it was when I got the data compression going. I had reached that sweet spot where I knew people wanted it because of the reaction to *Spellbound*, and I was giving them something bigger and better." ✱

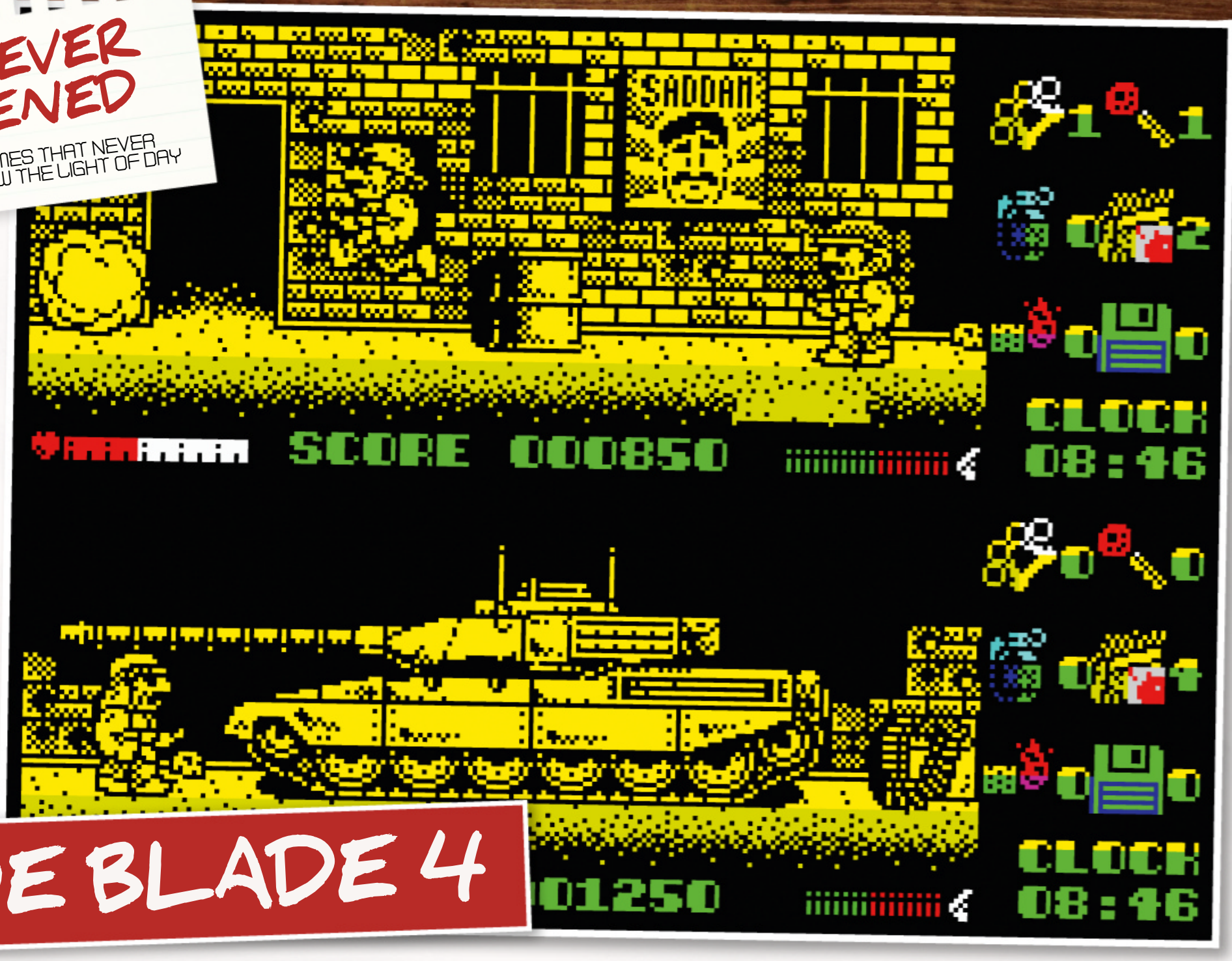


» [ZX Spectrum] Temporarily abandoning important items seems risky, but *Knight Tyme*'s limited inventory makes this unavoidable.

» [ZX Spectrum] Certain planets in *Knight Tyme* have defences that you can circumvent with specific objects.

WHATEVER HAPPENED TO...

GAMES THAT NEVER SAW THE LIGHT OF DAY



» This mock-up, created specially for this article by Jarrod Bentley, shows what *Joe Blade 4* was to have looked like.

JOE BLADE 4

Moustached mercenary Joe Blade successfully completed three missions before being declared MIA on his fourth. We interrogate those on the inside to determine his fate **Words by Martyn Carroll**

IN THE KNOW

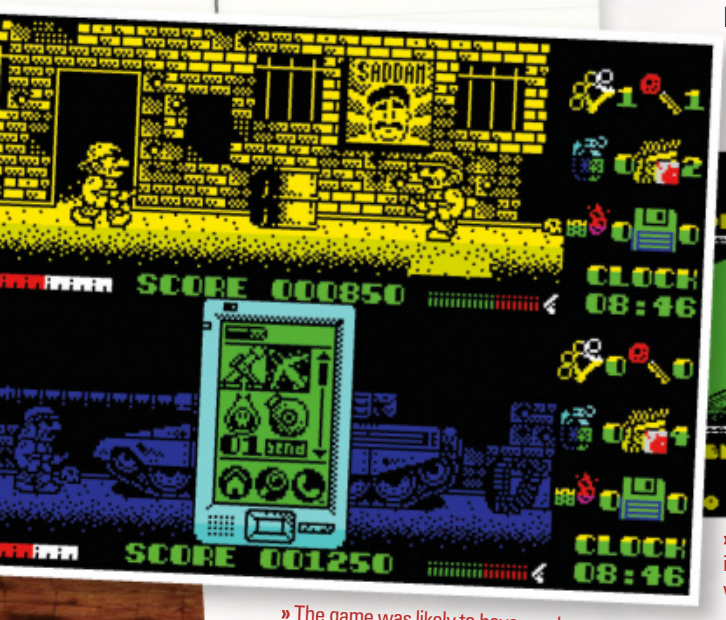
» **PUBLISHER:** PLAYERS

» **DEVELOPER:** PLAYERS

» **SYSTEM:** ZX SPECTRUM

» **DUE FOR RELEASE:** 1991

If you search some of the murkier backwaters of the internet you'll find a Spectrum game called *Joe Blade 4*. This is not the *real Joe Blade 4*; rather it's a crudely hacked version of *Prison Riot*, another game on the Players label that was released in 1990. You can see the reasoning behind this amateur hack, as *Prison Riot* was extremely similar to *Joe Blade 3* – Players just popped a warden's hat on Joe's head, and voilà, a brand-new budget game.



» The game was likely to have used a pop-up menu for the player to select the various traps.

» [ZX Spectrum] The '*Joe Blade 4*' that's circulating online is basically a hacked version of *Prison Riot* with a tweaked version of the *Joe Blade 3* loading screen.

Despite the obvious similarities, *Prison Riot* did not start out as the fourth *Joe Blade* game. "It was actually produced because of the Strangeways Prison riots that were happening at the time," says Paul Griffiths, former programmer at Players. "It got slammed by the press and was even mentioned on the news. It was probably one of the first controversial games to actually get noticed outside the industry."

While *Prison Riot* was testing the boundaries of taste, Paul was busy working on the real *Joe Blade 4*. "The original creator of *Joe Blade*, Colin Swinbourne, had left Players prior to progress starting on the next game," he reveals. "As the previous games in the series were such good sellers, it was decided that I would write the fourth one. Martin Severn had already done some graphics for it so it was fairly easy to jump on board."

The first three games were all pretty similar, but the plan was to switch things up for the fourth outing. "It differed in that it supported two players simultaneously, one playing Joe Blade, the other playing the main enemy. The screen was split into two, *Spy Vs Spy* style. Some of the gameplay elements from *Spy Vs Spy* were also going to be included to make it more tactical rather than just a run-and-gun game. It was still a bit *Rambo*-like, however. The objective was to rescue prisoners and also defeat the enemy." The setting was changed too, with Joe dropped into a topical conflict. "This time, the scenario was based on a current event which was the first Gulf War," says Paul, who remembers an in-game graphic of a Saddam Hussein wall poster. "Obviously, this was a little controversial back then. We were never really politically correct."

From a gameplay standpoint, it sounds like a promising concept. You

THESE RELEASED GAMES ARE A RIOT TO PLAY

PRISON RIOT

1990, PLAYERS

■ This is the nearest you'll get to playing a fourth *Joe Blade* game. Released the same year as the third game, it shares numerous similarities. The addition of booby traps is something that would have been expanded on in *Joe Blade 4*.

SPY VS SPY

1984, FIRST STAR

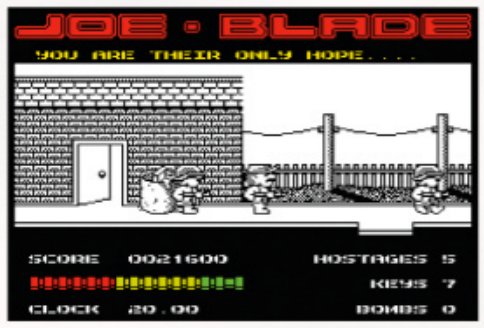
■ *Joe Blade 4* was heavily inspired by the *Spy Vs Spy* series, so you know where to go if you want to scheme like MAD against a human or CPU competitor. For us, the first game set in an embassy will always be the quintessential version.

DOUBLE AGENT

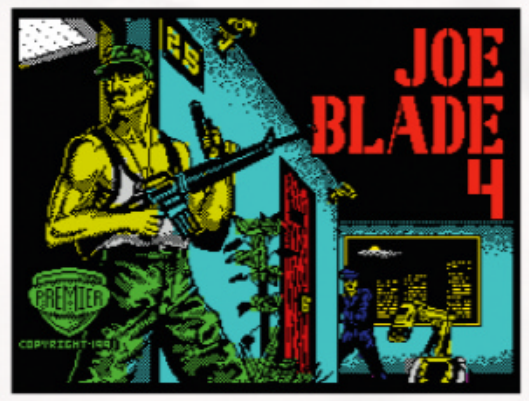
1996, FLAIR

■ The *Spy Vs Spy* mechanic is so clever that we can't believe more games haven't copied it over the years. This clone for the PC and Amiga is one of the exceptions, and it features a series of fun missions to bluff and bumble your way through.

» [C64] *Joe Blade 2* was more beat-'em-up than run-and-gun, and is probably the weakest of the series.



» [ZX Spectrum] The original *Joe Blade* was cheap and cheerful – and a certified hit for Players, hitting second spot on the budget game charts in February 1988.



"The screen was split into two and some gameplay elements from Spy Vs Spy were going to be included"

Paul Griffiths

can imagine sneaking around war-torn buildings, setting devious traps for your opposite number (with the series' trademark puzzle sequences returning to allow you to defuse explosives, unlock doors and so on). But as Paul explains, it was sadly not to be. "The game never saw the light of day as [parent company] Interceptor went into liquidation and all development was stopped. I got back from a holiday to find out the company had folded, owing me thousands of pounds in royalties."

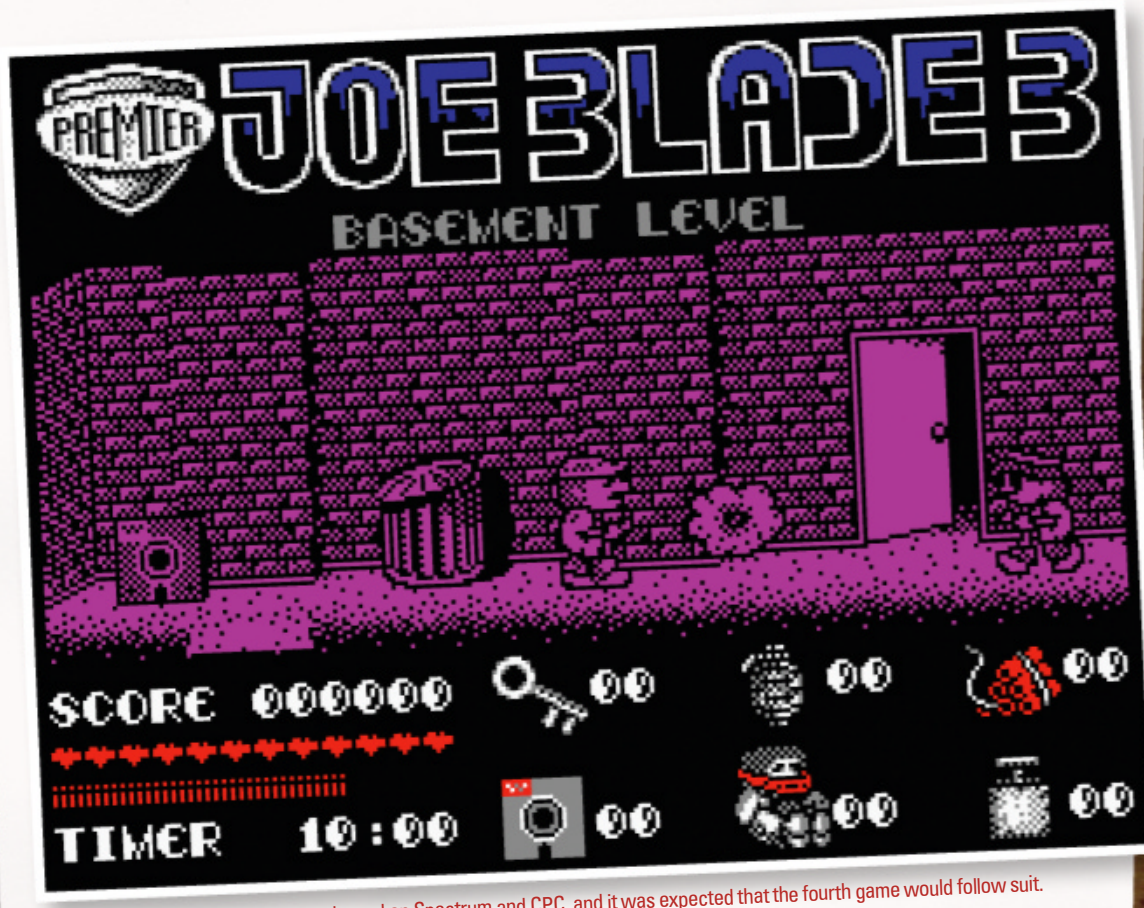
As for the game itself, it was pretty close to being finished when work was halted. "The Spectrum version was roughly 80% complete. Most of the rooms and graphics were in and you could move around the map. It was more the 'extra' gameplay which wasn't yet complete. There was also an Amstrad CPC version planned. It's always a shame when a project you've worked on never actually makes it out, but it happens quite often for various reasons."

As the game was almost complete, there's a chance that something might still exist. We checked with the game's graphic artist Martin Severn to see if he had saved anything. "I'm sorry to say that I don't have any of my work from back then. It was all produced on the Spectrum using Microdrives and I've no idea where the carts ended up." He also reveals that unfinished projects were common at the company. "We were churning out a game every few weeks and there was so much work that got started and never finished, including a few full-price games. There were no producers back then and we were left to do whatever we liked. Looking back, I'm amazed we finished anything."

There is a chance that Paul still has the incomplete source code for the game somewhere in his personal archives. "I think I have everything from 1986 onwards," he teases, raising our hopes. "That's 100-odd games, a lot of stuff. It's just a case of digging it out. I may even have a screenshot somewhere if I can find it."

As we await further discoveries, we asked veteran pixel pusher Jarrod Bentley (*Crystal Kingdom Dizzy*, *Turbo The Tortoise*) to mock up a couple of Spectrum screens to show how the game would've looked. Based on Paul's information, they show the split-screen view, the Middle Eastern setting, and the concept of traps being used to thwart the enemy. Paul confirms that the screens are "pretty close" to his game, so for now this is the closest we'll get to seeing how Joe's final mission played out. ✱

» There's a chance the game's source code is on one of Paul's many development disks. "I've probably got a lot of gems," he says.



» [Amstrad CPC] *Joe Blade 3* was released on Spectrum and CPC, and it was expected that the fourth game would follow suit.

THE HISTORY OF

BRIAN LARA CRICKET

IN THE NINETIES AND NOUGHTIES, A HOMEGROWN CRICKET FRANCHISE NAMED AFTER RECORD-BREAKER BRIAN LARA ENTHRALLED GAMERS. THE ENTHUSIASTS WHO PASSIONATELY CREATED IT SPEAK TO US ABOUT ITS UNEXPECTED RUNAWAY SUCCESS

Words By David Jesudason

» Alan Perrie at Codemasters says *BLC* "benefited from that competitive nature of playing it on the couch with your mates".

Jeremy Wellard has a way of thinking that was well-suited to making videogames. "I've got that mind a lot of [sports fans] seem to have where you just think about all the little intricacies of the sport that you play that translates really well to games," he tells us. Jeremy made the first three *Brian Lara Cricket* games, in addition to working on their predecessors, *Graham Gooch's Test Cricket* and *World Class Cricket*. "A lot of games developers – especially at that time – didn't have this."

It's bizarre to think that there was an era when knowing about sports and programming marked you out as unique now that the likes of *FIFA* have studios of developers and global fanbases. But in the Eighties and Nineties, sports gaming was a cottage industry with a smaller audience of players. Jeremy helped change this first with *Brian Lara* and then by working on EA's *Cricket* series, showing the sport, like football, had global gaming appeal.

It all started because of a familial connection Jeremy had with Peter Calver

» Alan Perrie pictured with Brian Lara, who became known outside of the cricket world after a series of record-breaking innings, including 501 for Warwickshire.

» [Amiga] When the original *Brian Lara* game came out, no one expected a cricket game to have mass appeal.

» [Amiga] A coin toss could decide whether you spent ages bowling, but you could skip it in *Lara 96*.

» [Amiga] Graham Gooch was the big name Audiogenic used before Brian Lara.

> "AFTER I FINISHED UNIVERSITY IN 1993, PETER CALVER CAME AND KNOCKED ON MY DOOR AND JUST SAID, 'DO YOU WANT TO COME AND WORK FULL-TIME? YOU KNOW IT'LL BE IDEAL. MAKE SPORTS GAMES – YOU PLAY A LOT OF SPORTS'"
>
> JEREMY WELLARD

who ran developer Supersoft. Peter was in a relationship with Jeremy's mother, Pearl, after they met working in an accountancy firm, and the couple soon left this job for Peter's computing business, which became later known as Audiogenic. Jeremy would playtest the firm's games in the Eighties, which included *Emlyn Hughes International Soccer* and the 1988 action-adventurer *Exile*. This computing childhood was mixed with playing sport at high levels, including representing Hertfordshire in cricket as a teenager.

"After I finished university in 1993, Peter Calver came and knocked on my door and just said, 'Do you want to come and work full-time? You know it'll be ideal. Make sports games – you play a lot of sports,'" recalls Jeremy.

Later on, he would help make two editions of *FIFA* for EA as well as a string of other successful sports franchises, such as *NBA*, *NHL* and *Madden* after setting up HB Studios in 2000 in Nova Scotia, Canada. The success of the franchises his company produced for EA allowed him to retire five years ago, but it's the cricket games that he made in the Nineties that he remains proudest of.

The first taste Jeremy had of them was in 1985 with *Graham Gooch's Test Cricket* for the C64, Acorn Electron, BBC Micro and ZX Spectrum, which he helped with by formulating the game's control system when he was just aged 16. *GGTC* was a blocky affair but offered players the chance to make tactical decisions in 'simulation' mode and had a pretty simple knock in 'arcade' mode. However, it was lauded for its accuracy – which was Jeremy's ▶

CONVERSION CAPERS

HOW THE FIRST BRIAN LARA GAME DIFFERED

PC

The DOS PC version of the game appeared shortly after Brian Lara's record innings in the summer of 1994. It was a tweaked version of *Graham Gooch's World Class Cricket* with almost indiscernible features but with a few changes to players' names. The graphics weren't stunning, especially when the ball went into the field, and the players looked tiny.

AMIGA

A similar version appeared on Amiga but it was easier to bat, with AI that was more realistic for beginners. Like the PC version, using a mouse and keyboard was tricky, and navigating the menus and player setups was particularly clunky. The game itself felt a lot less static than the PC version and was worth the loading time.

MEGA DRIVE

Sega fans were spoiled as their title had an excellent control system, proving the game was really meant for consoles. Jeremy Wellard confirms this, and admits he enjoyed working on this version the most out of the three. "The Mega Drive version was by far the best," he says. "It was the ideal platform for it and the controller worked so well."

forte, drawing on his first-hand experience of the sport. In the summer of 1993, after Peter's fateful call, Jeremy was hired full-time at Audiogenic as producer/designer to work on the latest edition of the series, *Graham Gooch World Class Cricket*. The PC version was programmed by Simon Prytherch in Coventry, while Gary Sheinwald worked on the Amiga version from Newcastle.

"At that time there was a lot going on," Jeremy adds. "I worked with Simon on the PC cricket games, Gary on the Amiga and the Mega Drive cricket games, Graham Blighe on the Amiga football game *Wembley International Soccer,* and at [Liverpool developer] Denton Designs on the rugby games for Amiga and PC. The *Graham Gooch* game on Amiga was early in development when I started. I'd been working part-time for the previous three or four years while at university on the cricket, rugby and football games, bringing the sporting perspective. In those days, there was one programmer per project, a shared artist and me. The programmers did much more varied stuff than they do now."

Graham Gooch World Class Cricket paved the way for the success of *Brian Lara Cricket* as it earned a lot of plaudits for its faux-3D appearance. It was effectively re-released in 1994 as a special edition on PC but renamed *Brian Lara Cricket* by Audiogenic after the firm bought the Trinidadian batsman's image rights. The game then appeared a year later on the Mega Drive and Amiga.

"*Brian Lara Cricket* was super successful," Jeremy says. "We were quite surprised. I remember I knew it was a decent game but I didn't realise that cricket would be that popular."

One of the reasons *Brian Lara Cricket* gained more mass appeal was because in the mid-Nineties Mega Drive owners were willing to experiment with different genres. The console version made batting super intuitive, and moving around the crease, adjusting to the bowling, became a very smooth experience.

"Then it was just a different gaming age," says Jeremy. "Now people are very particular about what they choose to play. You certainly got people playing it that didn't usually play cricket or normally weren't necessarily interested in cricket."

Brian Lara Cricket mimicked the TV coverage of the sport with the batsman facing the camera, and the game showed the player where the ball would hit the pitch – so although you were a batsman, you had the TV camera's view of the action. Bowling – which in real life can be up to 100mph – would be too difficult to play if

» [PlayStation] Having a net session in *Brian Lara 99* was recommended if you wanted to be able to score runs in a match.

> "FOR A BUNCH OF WEEKS IT WAS NUMBER ONE DURING THE SUMMER, WE WERE QUITE SURPRISED. I REMEMBER I KNEW IT WAS A DECENT GAME BUT I DIDN'T REALISE THAT CRICKET WOULD BE THAT POPULAR"
>
> JEREMY WELLARD

CARRYING THE BAT

HOW BRIAN LARA CRICKET IMPROVED THE GENRE

DIFFICULTY

The PC versions of the game were always more difficult but the Amiga and Mega Drive versions were good for novices.

IN CONTROL

Particularly using the Mega Drive's joypad, controls were improved compared to Audiogenic's early cricket games.

MORE DETAIL

For cricket buffs, the first *Brian Lara* game showcased more classic matches and updated team rosters.

GRAPHIC EQUALISER

The Mega Drive had the best visuals, especially compared to the *Graham Gooch* games. "A technical requirement, not a creative choice," Jeremy says.

» [PC] The 2005 edition of *BLC* featured an excellent 'Classic Mode' that featured famous crickeeters like Imran Khan. It was also in black and white.

» [PlayStation] Commentary was added for the first time in *Brian Lara 99*, courtesy of *Test Match Special*'s Jonathan Agnew and Geoffrey Boycott.

you saw the action from the batsman's 'eyes', so this TV-like angle meant novices could learn to hit the ball easily and wannabe star batters (like your correspondent) could (sometimes) live out their fantasies of scoring centuries against the most feared bowling attacks in world cricket.

Using *Brian Lara*'s name was a masterstroke, too, as the talented batsman was more iconic than Essex and England's Graham Gooch, and he had just become a record-breaking star scoring 501 in a match for Warwickshire, which is still the highest score by an individual player. Codemasters, which is based in the county Brian Lara played for, would have taken note of both the game and the star attached to it as the company was building up a reputation for sports franchises.

At the time, the only title that came close to being a rival to *BLC* was a SNES game called *Super International Cricket* made by Beam Software, a sequel to the Australia-only release *International Cricket*. It was faster paced than *Brian Lara*, more arcade-like (it even had 'poppy' on-field music) and there were no licensed player names – some cricketers were even named after the developers. *SIC* spawned several sequels and morphed into EA's *Cricket* in the Noughties, but in 1994 all British gaming cricket fans were *Brian Lara* fans.

Alan Perrie, senior product manager at Codemasters, agrees that Brian Lara was the ideal choice for the series but claims that the gameplay was key. "Codemasters had a real knack for choosing sportsmen who were slightly left-field who had global appeal rather than just local appeal," he says.

"Cricket can get complicated with fielding positions. But the essence of having a knock-about and not getting bogged down in all that was certainly part of [*BLC*'s] success."

The first *Brian Lara* game was so sought after that it only dropped down the charts because copies sold out. The Mega Drive version was produced by Audiogenic for Codemasters and the deal worked so well that *Brian Lara Cricket 96* was also published that way. This sequel had the same fluid game mechanics and more features, such as different tournaments, historic matches, rain and an incredible 16-bit theme tune based on Booker T & The MG's Soul Limbo. Crucially, Jeremy included the revolutionary autoplay innings option, which meant players could get the CPU to skip bowling and concentrate on batting, which was far more fun.

In the end, Codemasters "swallowed up" Audiogenic after *Lara 96* so that it could own and control an elite cricket series to go with the other sport franchises it was producing. It meant that Jeremy, Gary Sheinwald and Graham Blighe joined the Midlands firm that was producing hits such as *Jonah Lomu Rugby*, *Pete Sampras Tennis* and *Colin McRae Rally*.

"The first day they met me at the reception and took me to the room where they're working," says Jeremy who moved to Warwickshire when the deal was made. His other Audiogenic colleagues worked remotely and Peter Calver did not follow at all. "There was no computer. They were really disorganised at that point. There was a lot more pressure, a lot more. It was a lot higher profile."

The game Jeremy was brought in-house to construct at Codemasters was *Brian Lara Cricket 99* for PlayStation and PC, the first proper 3D version of the sport. He had total control of the product, with Gary focused on the back end and Graham on the front end.

"That was an epic development process," he says. "It was 17-hour days. As a producer and designer, I just lived that game more than any other. I tend to throw

» [PlayStation] *Brian Lara Cricket 96* adopted a much more realistic rendition of the sport, largely thanks to the 3D visuals.

MATCH DAY

HOW EA'S CRICKET BECAME BRIAN LARA'S RIVAL

EA's *Cricket* was a series of games that developed with each addition until eventually it used similar technology to *FIFA* in the Noughties. It meant that the *Brian Lara* series of games became the underdog, with Codemasters operating with fewer developers and programmers. Jeremy Wellard remembers moving to EA was a huge culture shift for him. "We used a real person for motion capture," he tells us. "I did it on the first two EA games I worked on [*Cricket 2002* and *Cricket 2004*], I was the cricketer. After that, we used a real cricketer, we had a lot of licences, we had real commentators, we built stadiums – I think we had 40-something stadiums in the game for that first one. So it was a whole different world, even just building a 3D model of a player – we were all learning." However, not all of the work was rewarding, and at times Jeremy's efforts went unnoticed – notably when experimenting with new foreign markets. "We developed a whole cricket game on PC based on the Indian Premier League – this must have been 2009/2010," Jeremy says. "It wasn't going to be in any other market, just India. I finished it, we didn't get a licence and they just canned it."

PLAYING THE NAME GAME

WHO FRONTED THE INTERNATIONAL VERSIONS?

Brian Lara may have been one of the most famous cricketers in the world, but in other countries the game occasionally was named after someone else to cash in on their popularity in that region. For example, in Australia 1999's game was named after spin-bowler Shane Warne, and in 2005 batsman Ricky Ponting was the cover star. The Indian market for games wasn't explored until *Lara 2007* when it was renamed *Yuvraj Singh International Cricket 2007* in Asia. As well as featuring different names in other regions, *Brian Lara* is well-known among fans for how the games changed cricketers' names to subvert licensing laws. This meant that you could control 'A Flantiff' instead of Andrew Flintoff. Alan Perrie at Codemasters found this a very charming feature. "In the olden days of legal clearance, you could get away with a Bert Leap (Brett Lee) more than you'd probably be able to do now, even though *PES* has made its name from doing that quite a lot with spoof footballers since." The cult following of these imposters even led to a Twitter frenzy when Donald Trump mangled Sachin Tendulkar's name on a visit to India calling him 'Tandelki', with many older gamers reminiscing about this quirk in *Brian Lara*. It's not clear if he was a fan of the series, but it's far likely that the surname stumped him and spiralled into a textbook Trump gaffe. Whatever the case, *Brian Lara* sailed close to the legal wind with its tweaks. "You could get away with a lot more back then," says Jeremy. "You could get close and just change one letter or something and it would be okay. There's no way to do that now."

» [PC] Justin Forrest was the brains behind *Brian Lara 2005*. He went on to make EA's *Cricket 07* and *Rugby 08*, as well as *Fight Night Round 4*.

» The superstar himself would get involved with the publicity of his cricket games.

» [PC] Was US President Donald Trump a fan of *Brian Lara*? His 'Tandelki' gaffe led some to speculate on that possibility.

"I ACTUALLY DELAYED THE RELEASE SLIGHTLY BECAUSE I WASN'T HAPPY WITH A FEW GAMEPLAY ELEMENTS WHICH WEREN'T AS POLISHED AS THEY COULD BE"

JUSTIN FORREST

myself into it. I'd be in the office for hours, and I'd take it home and I'd play it all the time to see if the CPU makes the right tactic choices or it feels right. I just spent forever playing that game and that's the one I'm most proud of."

As well as being 3D, it was the first game of the series to feature commentary, with Jonathan Agnew and Geoffrey Boycott adding their voices to what was now edging towards simulation. But it still retained its quirky nature.

"Me and my friends played cricket, and lots of *Brian Lara*," adds Alan Perrie. "We would say stuff in real cricket that we'd hear Agnew say in our game, so if there was a run out we'd always shout: 'They're in disarray!'"

The motion capture was done by Jeremy simulating batting, bowling and fielding – and the game became more difficult to bat with more shot options and experience of actual cricket being helpful. Now a player could bat freely at domestic level but have to rein themselves in on the international stage in an intuitive and rewarding process.

Compared to its predecessor, it was a commercial failure. But considering it was shipped in the winter of 1998 after missing its summer deadline, it was

» [Xbox] What benefits are there to working on a cricket game? Well, you can insert yourself as a player for one…

» [PSP] *Brian Lara Pressure Play* was the last game named after the Trinidadian cricket master who retired the year of its release.

popular, reaching number four in the Christmas charts. "It was a really good game," says Jeremy. "We started making the follow-up on PlayStation but then I emigrated in the summer of 1999. Gary and Graham left soon after."

So instead of producing more *Brian Lara* games, Jeremy moved to EA in North America and started work on the rival series, *Cricket*. This franchise, which ran alongside *FIFA* and other EA titles, proved popular and it gave Codemasters a headache as the *Brian Lara* games were much-loved but someone had to replace Jeremy.

To solve this problem, the Midlands firm copied English cricket with its recent history of importing South African talent (à la Kevin Pietersen) and it hired Justin Forrest to work on *Brian Lara International Cricket 2005*. "I kind of went in with a completely clean slate because I had my ideas of how or what I wanted to see in the cricket game," says Justin whose family left South Africa due to apartheid.

"One of the key things was focusing on the balance between bat and ball. Most cricket games focus on batting, and bowling is almost an afterthought. I played cricket my whole life so it's part of my DNA. The core of the sport is that balance between bat and ball, and people may enjoy batting more than bowling but I think that's because a lot of cricket games have failed to deliver something that makes you kind of have fun when you're bowling."

He's right. Previous *Brian Lara* games had made batting fun and bowling something that was akin to a chore, especially as autoplay encouraged players to skip it. Justin removed this option and concentrated on making every aspect of the game enjoyable. Like Jeremy, who now was effectively his rival, he worked tirelessly on the game to get it ready for the summer of 2005. He had to, as Jeremy had access to EA's vault of money to back his vision up and *Cricket 2005* was being produced with an official Ashes licence.

"I actually delayed the release slightly because I wasn't happy with a few gameplay elements which weren't as polished as they could be," Justin says. "The game actually came out the day before the Ashes kicked off."

The summer of 2005 is cricket's 1966 FIFA world cup, where the greatest Test series ever featured one of the toughest Australian sides to tour and an emerging England side boasting a ferocious pace attack. *Cricket 2005* and *Brian Lara 2005* were playing out the same bruising battle, with Jeremy's immense cricket experience making him a favourite to produce the better game and top the charts, especially as EA was now the market leader producing hits *Cricket 2002* and *Cricket 2004* after a mixed success with is predecessors in the Nineties and the disappointing *Cricket 2000*. But it was the South African export that won the battle (like Ashes winner Kevin Pietersen for England) both critically and commercially for Codemasters, with *Brian Lara 2005* topping PlayStation charts for 12 consecutive weeks and being the all-formats number one for a month.

"To have an event that lifts the profile of the sport is always huge," says Justin. "There's no doubt about it. But I really do honestly think that the key reason why the game was so successful was the fact that it was really good fun to play.

"I never expected the visual fidelity of the game to be anything approaching something like a *FIFA* because we just didn't have a 50-man art team. It was a very small art team who had a lot on their shoulders, and I think they did a good job, but certainly that would have been an area that you could improve just by throwing extra resources at it. Gameplay, you can't improve by throwing extra resources, you've got to get that right at the core level."

A lot of gamers found that EA's *Cricket 2005*, which disappeared from the charts, was a bit on the buggy side, but Jeremy disagrees saying it was a general gameplay issue with HB Studios making two sports games at the time for EA.

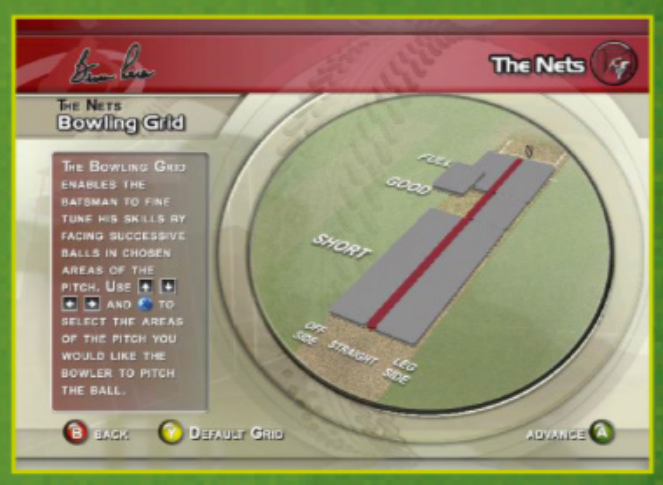
"We split into two teams at HB for the first time," Jeremy tells us. "I put all my attention on *Rugby* which in hindsight was not what I should've done. *Cricket* kind of just got dragged along and it didn't get much attention at all. So while visually it was really good, gameplay was pretty poor."

The final EA cricket game, *Cricket 07*, was more memorable than the last two editions of the *Brian Lara* series (*Lara 2007* and *Brian Lara Pressure Play*) made after Justin left Codemasters. Which is not a surprise as Justin departed for EA, too, to work on *Cricket 07* to form a dream team with Jeremy, who was creative director. Brian Lara himself retired from the game that year and the Midlands firm moved on as well buying an Ashes licence for a 2009 title, fronted by Kevin Pietersen, which was a commercial hit. The last cricket game the firm produced was *International Cricket 2010* with sales being marred by a poor English summer for the sport – a home series against Pakistan dogged by cheating accusations.

In fact, post-2005, cricket's popularity in general as a sport declined in the UK because of television coverage moving behind a paywall at Sky and it became more of a niche pursuit. Also, as Jeremy mentioned, it was starting to become a time when console gamers were becoming less willing to try different genres. But for the Nineties and Noughties, if you were a cricket fan then *Brian Lara* was the game to own. However, Justin doesn't entirely agree with us and throws in a googly: "I'm going to be contentious here, and probably put people's noses out of joint, but my favourite was *Super International Cricket* on the SNES!"

Somewhat unsurprisingly, Jeremy disagrees and concludes that *Brian Lara* was the definitive cricket videogaming series. "*Super International Cricket* was pretty much unknown and not a patch on our games," he tells us. "I had a very tight focus on how I wanted *Brian Lara* to be and *Super International Cricket* definitely wasn't it." ✱

» [Xbox] All versions of *Brian Lara Cricket* had one thing in common: to bat well, you had to time hitting the ball.


The Nets
The Nets
Bowling Grid
The Bowling Grid enables the batsman to fine tune his skills by facing successive balls in chosen areas of the pitch. Use and to select the areas of the pitch you would like the bowler to pitch the ball.
FULL
GOOD
SHORT
OFF SIDE
STRAIGHT
LEG SIDE
BACK
DEFAULT GRID
ADVANCE

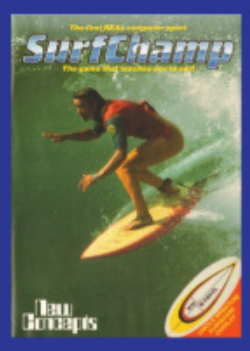
» [Xbox] Being allowed to see where the ball would pitch gave you a clue as to what shot you should play.

THE MAKING OF Surfchamp

» [ZX Spectrum] An meter depletes as you move your character. It's game over when it runs out.

Surfchamp was an anomaly when it was released on the Spectrum 35 years ago: a hardcore sports simulator with a plastic surfboard peripheral, created by a team of ambitious Irish academics. We caught up with the developers to find out more

WORDS BY NIALL O'DONOGHUE



IN THE KNOW

» **PUBLISHER:** NEW CONCEPTS

» **DEVELOPER:** NEW CONCEPTS

» **RELEASED:** 1985

» **PLATFORM:** ZX SPECTRUM, COMMODORE 64

» **GENRE:** SPORTS SIM

"You have drowned, use a leash!" Not the first thing you might expect after getting into the water in a surfing simulator. However *Surfchamp*, released for the ZX Spectrum and Commodore 64 in 1985 by Irish company New Concepts, was a scientist's take on a surfing game. Before you can even begin playing, you have to input data like your height and weight, select your gear (the wrong outfit can make you drown) and read detailed weather information.

Once you're in the game, the tide constantly shoves you back until you manage to hop on a wave, taking you to a close-up of a surfing stickman. However, it's quite difficult to play *Surfchamp* as it was originally intended today without its star peripheral: a plastic surfboard that attaches to the keyboard.

Dr Norman McMillan, the 75-year-old CEO of Advanced Nano Technologies [ANT], cofounded New Concepts in 1984 whilst lecturing at the Carlow Regional Technical College, alongside fellow academics Susan McKenna-Lawlor, an internationally renowned astrophysicist, and John Frayne, a jewellery craftsman. They self-funded the company, with Norman contributing £20,000, and hoped that it would generate enough commercial revenue to fund their research projects.

Norman has decades of experience in scientific research and education, and he played football growing up, although surfing didn't come quite as naturally to him. "I wasn't a great surfer because I was always too old," he laughs. However, Norman thought that surfing was "fabulous fun" and wanted to develop a physics-based simulation with New Concepts. "I couldn't give a monkey's about gaming," Norman says. "I am a surfer who's interested in proper simulation of the sport."

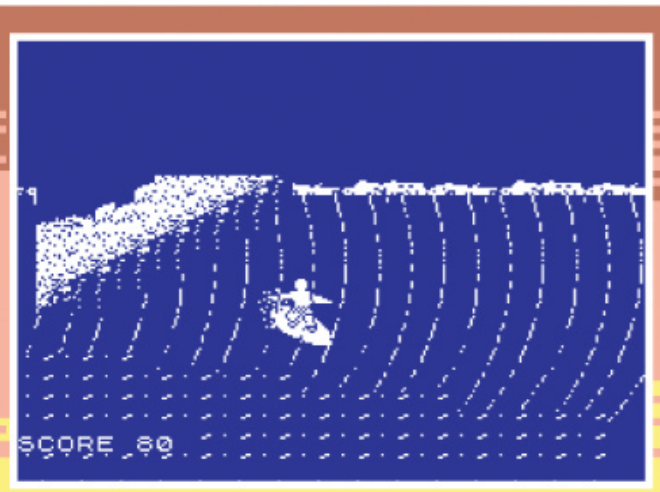
Damian Scattergood, managing director of STAR Translation Services in Dublin, was 18 years old when he joined New Concepts as a programmer, one of his first jobs. Damian developed the tutorial for the Commodore version of *Surfchamp*. "You knew when you were hired, you were here to make stuff up, you were here to be creative… you were going into the unknown" he explains.

» Today, Norman is working on ways to identify COVID-19.

» This cool HUCI helmet unfortunately never made it past the prototype phase.

» Surfers trying out *Surfchamp* at the European Surfing Championships in 1985.

» Dr Norman McMillan on a surfing trip with his family in the Eighties.



» [ZX Spectrum] If you time it well, you can catch a wave and try to pull off tricks.

» [C64] *Surfchamp* was an interesting addition to the C64's library.

The game was played using a plastic surfboard overlay, created by John Frayne, which was held in place on a keyboard with a plastic clip and tilted to control the on-screen surfboard. By combining different motions, players could pull off different manoeuvres. "We would know, you're pressing these three keys here and one [on the] left, so you must be trying to do a Hang Ten," Damian explains, gesturing to a keyboard enthusiastically. "Obviously the graphics were a bit 'Eighties', but it worked reasonably well."

Norman analysed "the physics of waves and the relationship between [it and] the movement of the board on the water" to write machine code algorithms for *Surfchamp*. "He was looking for brilliance and we were trying to give him brilliance," Damian says, who enjoyed the freedom of working on a project that had few reference points at the time. However, memory limitations and the addition of what Norman calls "peripheral stuff", like surf music and a busier interface, meant that the game had "less proper implementation of the algorithm", becoming more sluggish and falling short of his ambitions.

Promotion for the game included a visit to the European Surfing Championships 1985 in Rossnowlagh, County Donegal. Exceptionally calm seas sent dozens of pro surfers to compete in the 'First World Computer Surfing Championships', with British surfer Jed Stone becoming the first (and last) champion, *Sinclair User* magazine reported at the time. Jed praised *Surfchamp*, telling the BBC in May that "the basic principles [of surfing] are there" and describing it as a "forerunner" of modern sports simulators. New Concepts even had hopes of having more 'World Computer Surfing Association' competitions run in conjunction with the British Surfing Association, according to design documents Damian shared with us.

Coming up to Christmas, New Concepts had orders for approximately 180,000 copies of *Surfchamp*. "We had the manufacturer in Dublin, we had the boxes, we had the printing, we had the computer tapes ready to be manufactured… they were all ready to go," Norman remembers. However, the Industrial Development Authority Of Ireland [IDA Ireland] only offered funding for 3,000 copies of the game for test marketing. Norman heavily criticises the lack of awareness that the organisation had of the videogame industry at the time, saying, "The IDA thought we were the same as making tables and chairs."

After this test launch, the team at New Concepts was told they would have to make a version of *Surfchamp* on the Commodore by the IDA. "I said, 'You're a bunch of donkeys, you don't know what you're talking about, we won't sell any, it's already been released,'" Norman says. As he'd predicted, they sold just 600 copies of the Commodore 64 version and started to run out of money.

This left ideas for water skiing and sailing simulations, of course with bespoke peripherals, and a version of *Ski Champ* for IBM PCs dead in the water. However, neither Damian nor Norman have any regrets about the closure of New Concepts. "We never really stopped," says Norman, who is currently working on a way to identify COVID-19 molecules in drop samples using his company's Spectrometer device. Or, in Damian's words: "We had an opportunity, but the world wasn't ready for us to do it." ✱

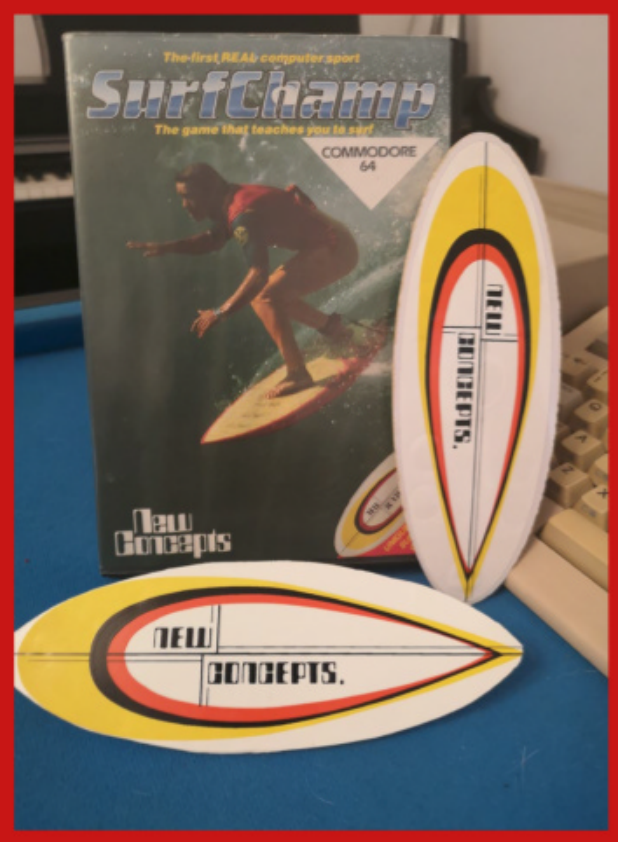
» Damian Scattergood is the managing director of STAR Translation Services in Dublin, Ireland.

PERIPHERAL VISION

New Concepts made a number on interesting prototypes…

■ **Although New Concepts was short-lived, the company worked on a number of ambitious prototypes.** For example, *Ski Champ* was controlled with two ski overlays that a player moved along the grooves in a keyboard, according to Norman. "They were nearly finished," he tells us. "These weren't fictions: these were fully developed concepts." However, Norman is most proud of his Head Up Control Interface (HUCI), a capacitive sensor that he attached to objects like surfboards or helmets, turning them into motion-sensitive controllers. "The sensors were integrated into this device that could be put in the top of a helmet," he explains. "The lead then came out the back of the helmet." The helmet controller was prototyped for a jetpack platformer Damian was developing called *Vidy-Vody*, an homage to the 1983 Spectrum game *Jetpac*. "If you had this helmet and you put it on your head and you tilt left, you tilt right, it's the same as a joystick," he remembers. Players would use a joystick attached to the helmet to shoot.

Although the HUCI was never released, due to its cost and potential health and safety issues, Damian and Norman both compare the technology to an early version of the Nintendo Wii. "We found that when you were [playing] and you had this on your head instead of using the joystick, you could control things so much better. It was beautiful in comparison; the other thing was bloody crude," Norman says.



FROM THE ARCHIVES

INTELLIGENT GAMES

It existed for 14 years and worked on some of gaming's biggest franchises, so it's about time we studied the rise and fall of this often overlooked studio

WORDS BY DAVID CROOKES

» *Imperium*'s coder Nick Wilson and Intelligent Games' founder Matthew Stibbe strike a pose in a promotional shot taken by publisher EA.

It's November 1995, and the features editor of *PC Zone*, Chris Anderson, is visiting the Chelsea offices of Intelligent Games. He's looking to pen an article about its latest title, *Waterworld*, but he's hopelessly lost, eventually arriving flustered, late and very surprised.

Chris is expecting "a small company" with "a handful of developers". Instead, the offices are within an inconspicuous pair of five-storey townhouses on Munro Terrace, where 25 people are working hard on different projects.

"We didn't get a great deal of attention at the time compared to some studios," laments Matthew Stibbe, explaining why there was a misconception about the size of his company. And yet this was a significant developer which worked with some of the biggest names in games – selling more than 2 million copies in the process.

Much of the success was down to Matthew himself. Certainly, without him the company would never have got off the ground. He'd been a passionate gamer and created his own board game in his final year of boarding school, aged 18, drawing on an obsession with the Vietnam War.

"I then took a year off before going to university and turned the idea, design and thought process into a computer game," he continues, of a title that became *'Nam 1965-1975*. This was duly snapped up by Domark and Matthew programmed it during his spare time at Pembroke College, Oxford. He also drew up designs for another title: the space adventure, *Imperium*, that was commissioned by EA.

"I remember finishing the coding and the QA on the PC version of *'Nam* in the spring of the third year when I was getting ready for my finals – a crazy foolish thing to do," Matthew reflects. Production of *Imperium* was less intense because EA assigned the coding and audio production to a programmer called Nicholas Wilson and the graphics to Carl Cropley.

"The producer was Kevin Shrapnell and Nick created this amazing thing that was almost like a Windows operating system – so fast and memory efficient," Matthew enthuses. After graduating with a 2:1 and with both games published and selling well, Matthew continued working in the games industry and, after moving to London, incorporated the company as Intelligent Games Limited.

"One of the first people to come on board was Richard Evans who became the company's top graphic designer," Matthew says. "He'd work in my little rented mews flat in London and we'd create all kinds of crazy proposals." These would be documented in great detail and give potential publishers a strong idea of how a game would be fleshed out before any code was written.

» Intelligent Games created short pitch documents for all of its games, explaining what would be involved. This one is for *Raptor*, which became *Azrael's Tear*.

» [PC] *Emperor: Battle for Dune* was a sequel to *Dune 2000* – a map editor came after the initial release.

» [PC] *Dune 2000* was published by Westwood Studios as a Windows remake of *Dune II: Building Of A Dynasty.*

> "THE CONTRACTS ALLOWED ME TO OPEN AN OFFICE AND HIRE SOME PROGRAMMERS, THAT WAS WHEN THINGS PIVOTED FROM ME PLAYING AROUND IN MY SPARE TIME TO DEVELOPING A BUSINESS"
> MATTHEW STIBBE

To give the documents a professional air, they were printed in colour on a Canon CLC 10, leased for £100 a month. "You'd put this shiny paper in and produce these glorious colour 300dpi prints and it really helped us produce professional-quality proposals for our games," Matthew explains.

As part of the process, Richard would create vivid watercolour illustrations while Matthew would work on the words, scan the images and lay page designs out using Adobe PageMaker. "That printer was the launchpad of Intelligent Games," Matthew affirms. "If Hewlett-Packard had a shed and Apple had a garage, then I had the CLC 10."

Among the winning designs was a game called *Sim Rainforest* that was sent to Maxis Software. "We also developed a proposal for a naval warfare game called *USS Ticonderoga: Life And Death On The High Seas* which I sent to Three-Sixty Pacific, the makers of *Harpoon*," Matthew remembers. Both were snapped up, with *Sim Rainforest* becoming *SimIsle: Missions In The Rainforest*.

"The contracts allowed me to open an office and hire some programmers," Matthew says. "That was when things pivoted from me playing around in my spare time to developing a business."

Matthew felt early on that he wasn't a great programmer so he passed the task to others. "I also realised fairly quickly that I wasn't that great at people management, either," he smiles, so Kevin Shrapnell joined the management team. "I wanted him to run the studio while I worked on the sales," Matthew remembers. "I was constantly on the road knocking on doors, talking to people, trying to sell things and do deals, reading contracts and arguing the toss about very small points."

During this time, harsh lessons were learned. Three-Sixty Pacific encountered financial issues, jeopardising the contract for *USS Ticonderoga: Life And Death On The High Seas*. "The company was struggling to pay us, and not being paid properly caused some problems for us, especially because it went on for a period of six months, leading to some fairly uncomfortable discussions," Matthew says.

"Because of this, Mindscape picked up the game and there was a transition that didn't really help with the development. It was certainly a

» [PlayStation] After Matthew Stibbe left, Intelligent Games looked to push more heavily into the brand-led children's games market.

SILVERSTONE
The fantastic Silverstone circuit is a dedicated motor sports facility located just a few kilometres from Northampton. The 5.140 kilometre lap consists of two long straights and a challenging mixture of slow, medium and high speed corners. Silverstone is very popular with the British teams and lies at the centre of F1's so called Silicone Valley with Jordan, Williams, Stewart, Benetton, British American Racing and McLaren all based near by.

» [PC] Rather than have you get behind the wheel, *F1 Manager* drew on Intelligent Games' strength in the simulation market.

NE - E - SE
MS2 - Online help - press 'H'
Hold right mouse button down to turn.
Hold both buttons down to move forwards.
MS2 - Online help - press 'H'.
Toggle helmet lock - press 'X' - locks view point vertically.
Centre head - 'Home'.

» [PC] *Azrael's Tear* is the only game for which Matthew Stibbe continues to get fan mail. "I probably get about one or two messages a month," he says.

TIMELINE

1·9·8·8
■ The Intelligent Games Co is formed by Matthew Stibbe.

1·9·8·8
■ Strategy game *'Nam 1965-1975* is designed.

1·9·8·9
■ Matthew starts work on *Imperium*'s design.

1·9·9·0
■ *Imperium*, coded by Nick Wilson, is published by EA.

1·9·9·1
■ *'Nam 1965-1975* is coded by Matthew for PC, it's published by Domark.

1·9·9·2
■ Matthew produces designs for *Sim Rainforest, USS Ticonderoga* and others.

1·9·9·2
■ The company becomes based in Munro Terrace, London.

1·9·9·3
■ The company incorporates as Intelligent Games Limited.

1·9·9·3
■ Kevin Shrapnell joins the studio from EA as director of development.

1·9·9·5
■ *USS Ticonderoga* and *Sim Rainforest* – now *SimIsle* – are released.

1·9·9·6
■ *Azrael's Tear* is released and sells 20,000 copies.

1·9·9·6
■ Intelligent Games' love of golf games begins with *PGA European Tour.*

1·9·9·6
■ The company moves to Kiln House, London.

1·9·9·7
■ *Waterworld* is released. Westwood Studios commissions *Command & Conquer* add-ons.

hectic time: I'd sold these games as bits of paper and I was building a businesses while helping develop code and launch a game at a time when the market was evolving fast."

Matthew's experience with Maxis was better but he was spending more time in a hotel in California meeting with clients and selling games than he was in his newly purchased apartment in London. "I racked up a lot of air miles but the development of *SimIsle* was a real high point," he recalls. "Maxis were lovely to work for and I enjoyed meeting Will Wright."

By now Intelligent Games was coming up with numerous designs, many of which were greenlit. Although some didn't see the light of day – including *Dark Hermetic Order*, *Flying Circus*, *Bloodline*, *Conjure*, *King Of Wall Street*, *Deadline News* and *Cops And Robbers* – Kevin's decision to move the developer towards "hit-driven, brand-led" games proved to be hugely successful.

"We were trying to take brands, films, toys and sport and create games around them," Matthew explains. So while Intelligent Games worked on the first-person adventure *Azrael's Tear* for DOS PCs in 1996 with Matthew as project lead, there was a growing emphasis on games that were more instantly recognisable.

> "WE WERE TRYING TO TAKE BRANDS, FILMS, TOYS AND SPORT AND CREATE GAMES AROUND THEM"
> MATTHEW STIBBE

As such, Steve Cuss coded *PGA European Tour* and the team worked in the add-on course, The Oxfordshire Golf Club. This led to *PGA Tour: Laptop* for those wanting to game on the go, as well as *PGA Tour 98*, *Tiger Woods 99 PGA Tour Golf* and *Pro 18 World Tour Golf*.

"There was a very strong golf contingent at Intelligent Games and there was a joke that we'd hire anyone with a handicap under ten," Matthew laughs. "We could have fielded a pretty good golf team and it was great that we could work on niches that the developers enjoyed."

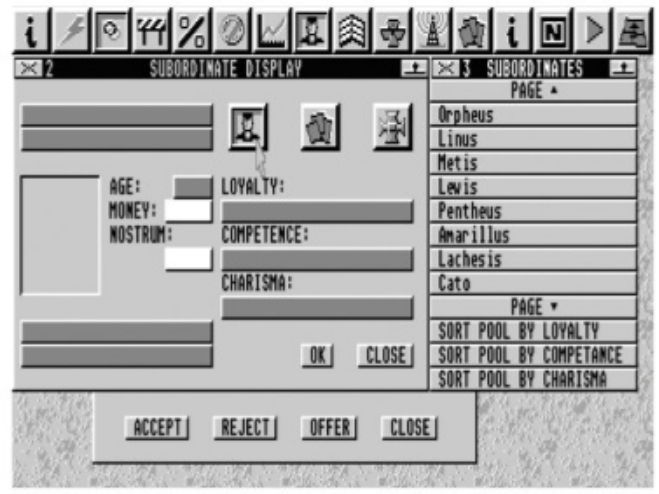
Intelligent Games also worked on *Waterworld* – the game Chris Anderson was going to see. "The film hadn't come out when we signed up to this game and we felt it was the most exciting thing ever," Matthew recalls. "To us, it was this big feature film with Kevin Costner, a movie that would have lots of explosions and we loved the thought of being part of it."

» [PC] *SimIsle: Missions In The Rainforest* was released for PC (DOS and Windows) and Mac, with Maxis Software cofounder Will Wright being very supportive of its development.

Unfortunately, the post-apocalyptic action film sank to the bottom of the ocean, and this affected sales of the game. "A lot of air went out of the room when the film came out," Matthew says. "But in retrospect, it put us on the radar of Westwood Studios which commissioned Intelligent Games to work on the add-ons *Command & Conquer: Red Alert – Counterstrike* and *Command & Conquer: Red Alert – The Aftermath*."

Indeed, Intelligent Games quickly brushed away the disappointment of *Waterworld*. Now situated in new offices in Kiln House on New Kings Road, London, the studio was being asked by Westwood to remake *Dune II: The Building Of A Dynasty*, a reimagining that would ultimately be released as *Dune 2000*. By the time it was released, the company had moved yet again, this time to IG House, in Palliser Road, Kensington. This was a developer that appeared to be on the up.

Yet cashflow was always an issue. "Between 1995 and 2000, there was a constant worry about money," Matthew says. "I'd be spending time running cashflow projections and fretting about paying the bills, and there were months where it would be the 25th and I was like, 'If they don't pay me, I can't pay the payroll.'" Trouble is, the projects were on fixed-priced contracts, advanced against



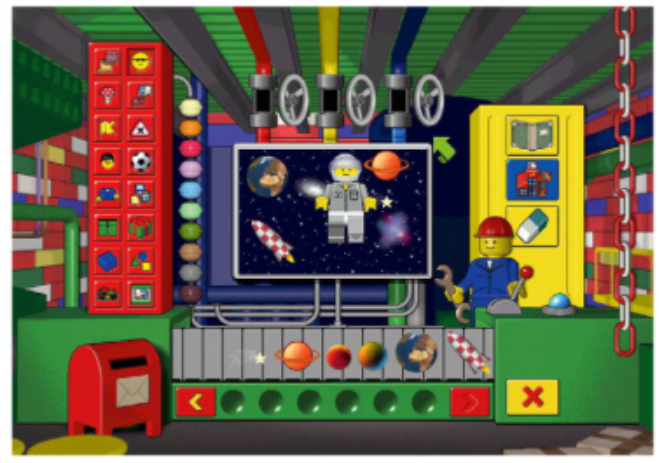
» [PC] *Imperium* was a stat-based strategy game made along the lines of *Master Of Orion* and it was an early release for Intelligent Games.

WHERE IS HE NOW?

M·A·T·T·H·E·W S·T·I·B·B·E

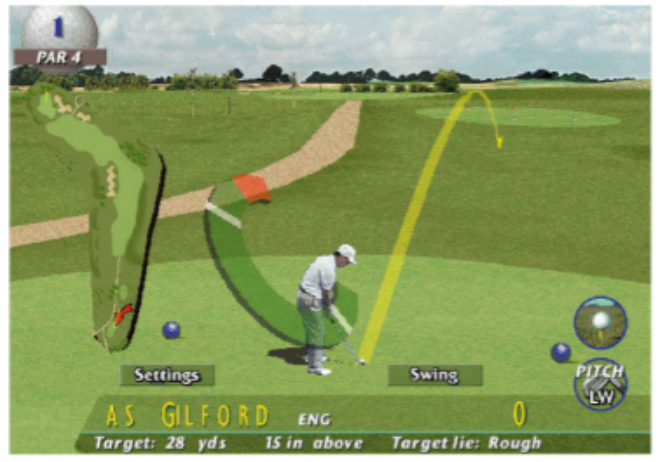
After leaving Intelligent Games in 2000, Matthew Stibbe worked as a freelance journalist writing for business, science and technology publications. In 2003, he became the CEO of Articulate Marketing, and in 2010 he became the CEO of Turbine, an online application aimed at taking care of office paperwork. He also cofounded the wine guide *Vincarta* in 2016 and today he refers to himself as a marketer, entrepreneur, writer, pilot and wine enthusiast.

DNA OF INTELLIGENT GAMES



"HIT-DRIVEN, BRAND-LED"

Director of development Kevin Shrapnell's motto was coined around the time Intelligent Games was developing *Lego Loco*, *Dune 2000* and the *PGA* games. "Almost all of the games were to have some recognisable film, toy or sporting association brand name attached to them," says the company's founder Matthew Stibbe.



SIMULATION AND SPORT

The developer was born from Matthew's passion to create games along the lines of *Sid Meier's Civilization*, *SimCity* and *Harpoon* ("The games I really loved," he says). As time went on, the golf-crazy developers also had a burning desire to produce titles based on their favourite sport, later turning their attention to football.

royalties by producers. There was a strong pressure to get the work done.

Even so, there was plenty of time for fun. Around this time, Intelligent Games worked on the simulation *Lego Loco*, which involved building towns and railways. "We packed the game with Easter eggs and one was a Viking statue that would turn around and pull a mooney," says Matthew. "Just as we were close to finishing the game, a very senior Lego man was being shown around the office and he was being given a demo of the game.

"One of the programmers said, 'Look, when you do this, the minifigure does a mooney,'" and I was aghast. I was standing behind him and Kevin, with the handler of the Lego executive and the producer, thinking, 'Oh shit, we're going to get this game canned.' But the Lego exec did that thing kings do in films and burst out laughing. He said, 'You've got to keep that in.' There was a great relief."

The same couldn't be said the following year, 1999, when Westwood Studios looked to buy Intelligent Games only for the deal to fall through. This left Matthew down in the dumps and realising he wanted to leave. Kevin, Steve and Neil Jones made an offer and Matthew sold the company to them in June 2000.

Intelligent Games continued and worked on titles such as *F1 Manager*, *The Powerpuff Girls: Mojo Jojo's Pet Project*, *Tweenies: Game Time*, *Lego Stunt Rally*, *Emperor: Battle For Dune*, *2002 FIFA World Cup* and a trio of *Action Man* titles. Reviews were generally good – *Emperor: Battle For Dune* was praised for its ambition, and *2002 FIFA World Cup* was a crowd-pleaser.

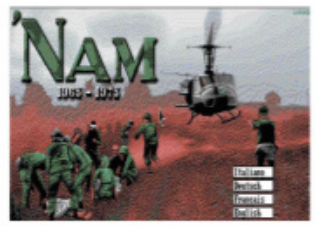
The developer also set up a division dedicated to making software for mobile devices that developed *FlipDis* for Palm OS, and it made a big effort to develop for the GameCube, PlayStation, Xbox and PlayStation 2 even though it became ever more clear the financial worries were not abating. It didn't help that the management buy-out had been achieved using company money and, by 2002, the writing was on the wall.

"I remember the budgets were getting bigger – they were into seven figures per game by the time I left and that meant the roll of the dice had more riding on it," Matthew says. By comparison his first game had cost £35,000 to make. Now the required teams were far larger and projects were taking longer to complete. In December 2002, Intelligent Games closed and its assets were liquidated. So had it simply grown too big too fast?

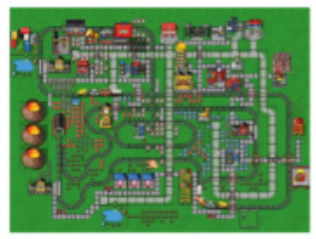
"In each of the buildings we occupied, we almost ran separate companies," Matthew says. "At Munro Terrace at the start it was a group of people having fun and making games, at Kiln House we were maturing and working out how to succeed. And at IG house, well, that was the factory where we were chasing after this advancing horizon of industry and consumer expectations."

Matthew looks back fondly, even though he's left the industry. "I have all the games we published still sitting on the shelf, and when I look back on my life, I think, 'I did that'," he says. "I remember wandering around the Computer History Museum in California and they had *SimIsle* in a cabinet. For me, that's a tremendous legacy." ✱

» [PC] The movie *Waterworld* sank and the game followed suit – it lacked any real development flair.



» Created by Matthew Stibbe while he was studying at Oxford, *'Nam 1965-1975* was based on a board game he had devised.



» [PC] Matthew Stibbe enjoyed working on *Lego Loco*: "I occasionally met young people now who were kids who played it and still talk about it. It was simple, yet also quite complex."

TIMELINE

1·9·9·8
■ *Lego Loco* is released for Windows PCs.

1·9·9·8
■ The company moves to IG House, Palliser Road, London.

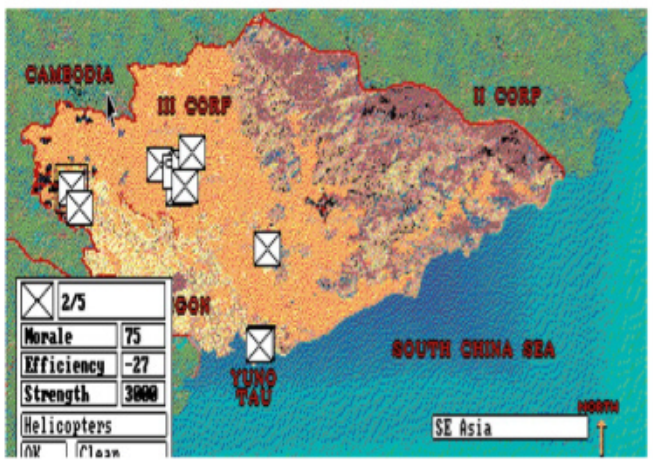
1·9·9·9
■ Westwood Studios seeks to buy Intelligent Games.

2·0·0·1
■ The studio enters the children's market with *Powerpuff Girls* and *Tweenies*.

2·0·0·1
■ The team starts to develop GameCube, PlayStation and Xbox games.

2·0·0·2
■ The studio starts working on PlayStation 2 games.

2·0·0·2
■ Intelligent Games runs into money problems. Its assets are liquidated and the doors are shuttered.



THE PC MARKET

■ Matthew coded a Mac version of *'Nam 1965-1975* but only his PC version was published, and Intelligent Games tended to concentrate on DOS PC games for a long time after. Titles were released for the Commodore Amiga and console games followed later, but DOS and Windows proved to be the key platforms.

IG
INTELLIGENT GAMES

FAST GROWTH

■ The company started with one man – Matthew Stibbe – but it grew to some 65 developers by 1999. The studio also hopped around London as it continued to grow and expand, eventually settling in IG House on Palliser Road where it remained until the company was closed and its assets liquidated in December 2002.

AMERICAN INFLUENCE

■ Intelligent Games' main publisher base was in the US. "There was something about California games companies – and I'm looping Westwood in, even though it was in Las Vegas," says Matthew. "It felt very natural for us to sell to them and I felt like I wanted us to be an American company."

Pinball Fantasies

ALL THE FUN OF THE FAIR

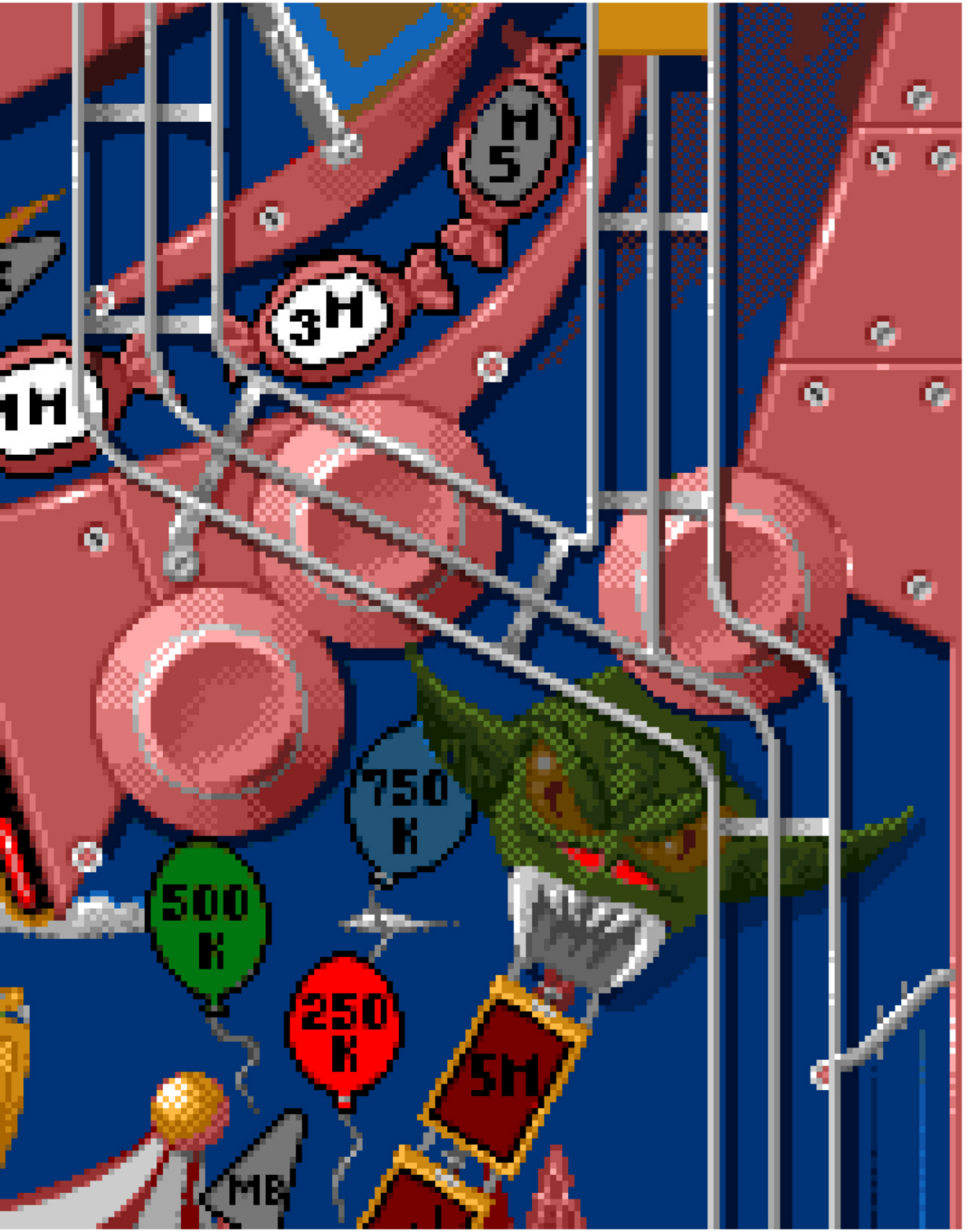
» AMIGA » 1992 » DIGITAL ILLUSIONS

I've mentioned a few times before how I regretted trading my huge NTSC Super Nintendo collection for an Amiga 1200, so I'm not going to go into great detail about it here. What I will say, however, is that while Commodore's 16-bit computer didn't really excite me in the same way that the Mega Drive and SNES did, it still introduced me to some fantastic games, many of which I still enjoy to this day.

In addition to stalwarts like *The Secret Of Monkey Island*, *Alien Breed* and *Eye Of The Beholder*, one of the games I constantly played was Digital Illusions' excellent pinball sequel, *Pinball Fantasies*. I was a big fan of pinball machines growing up and while there were a few pinball games in my Amstrad collection, they were never really able to match the sheer speed of the games I enjoyed playing in the arcades. *Pinball Dreams* and its sequels did, and while I never owned the first game, I was able to get my hands on a cheap copy of *Fantasies* and I played the hell out of it before selling on my Amiga.

One of *Fantasies*' greatest strengths was that its four tables: Party Land, Speed Devils, Billion Dollar Game Show and Stones 'N Bones were all uniquely themed and had playfields that played very differently to one another. Billion Dollar Game Show had long ramps and the ball could reach dizzying speeds, while Stones 'N Bones had an interesting haunted house theme and a tower with a special bonus that couldn't be accessed until you had lit up the letters spelling out 'KEY'. Speed Devils was arguably the weakest table and one I rarely bothered with, but that didn't matter as I had so much fun playing Party Land.

Even now, that first table remains my favourite, not just because of its jolly funfair theming, but because there's so much to discover in it. It's a wonderful table for setting high scores and I'd have constant battles with my friends on it back in the day. Sadly, when I sold my Amiga and picked up another SNES I never picked up the *Pinball Fantasies* port that was released for it. Maybe I should seek it out, I hope it isn't too expensive…


H
5
3H
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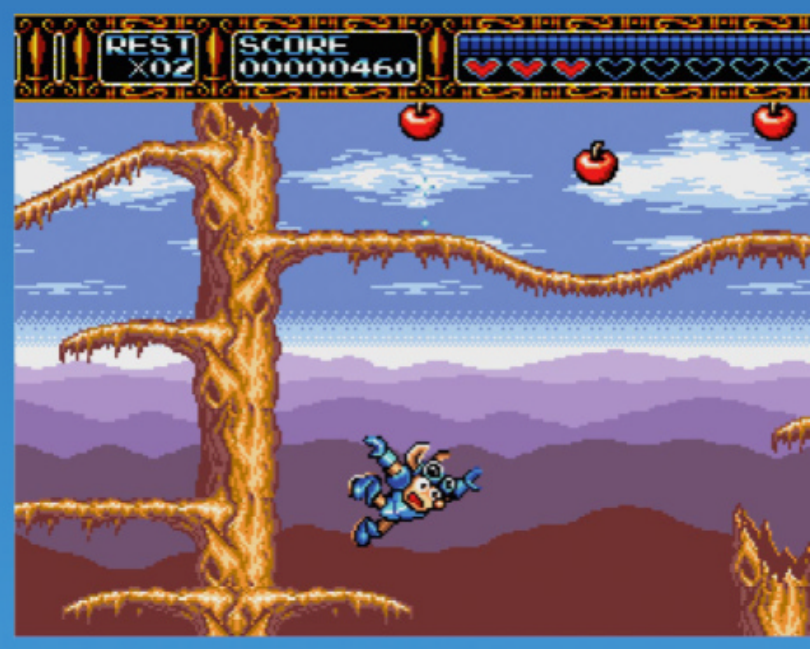
ULTIMATE GUIDE

ROCKET KNIGHT ADVENTURES

One hedgehog paved the way for many other animal mascot platformers in the Nineties, but only one arguably ignited the same spark, while also sharing the same colour. Strap in as we journey through the wonder of Rocket Knight Adventures

WORDS BY ALAN WEN



» [Mega Drive] Sparkster has a lot of expressive sprites, which only serve to make him more endearing.

As Sonic fought on the frontlines of the 16-bit console war in the early Nineties, his rival wasn't only Nintendo but every other game company looking to have an animal mascot of their own. There had, of course, been mascot platformers in games previously, though these were mostly using established licences such as Capcom's Disney platformers like *DuckTales* and *Chip 'N Dale: Rescue Rangers*. Konami in particular had a celebrated number of licensed games under its belt such as *Teenage Mutant Ninja Turtles*, *The Simpsons* and *Tiny Toons Adventures*, but the company was ready to enter the fray with its own original mascot.

Released in 1993 on the Mega Drive, *Rocket Knight Adventures* can easily be compared with Sega's iconic console mascot. Its hero Sparkster wore blue armour and was an opossum – not exactly the same family of species as a hedgehog (both are often mistaken as rodents) but still close enough, what with their pointed black noses. And he even has his own spin attack. For the North American box art he's also drawn with a scowling expression, a rocket knight with attitude, if you will.

But when it comes to playing the game, it's clear Konami didn't set out to imitate *Sonic*. *Rocket Knight Adventures* was the creation of Nobuya Nakazato, whose work included the run-and-gun *Contra* series, while the company already had a rich heritage in arcade shoot-'em-ups like *Gradius*, so it's not surprising that much of the gameplay resembles more of a shooter. That might sound a little

NOT JUST A RUN-AND-GUN

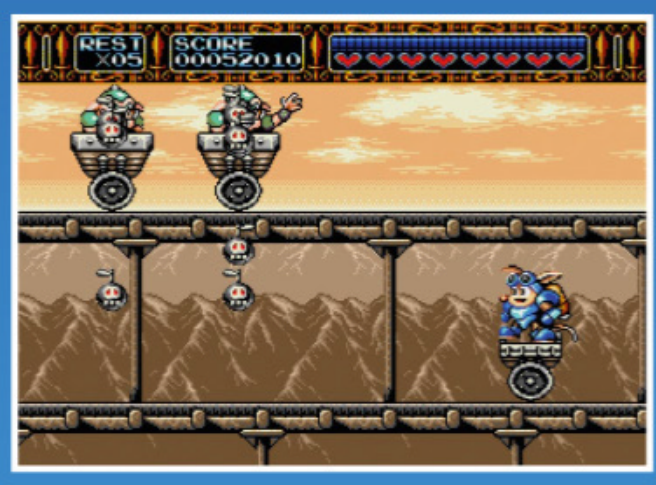
THIS OPOSSUM IS PACKED WITH POTENTIAL

» [Mega Drive] Sparkster's rocket charge isn't just for attacking enemies but also reaching other areas. He can also bounce off walls.

strange when you consider Sparkster isn't armed with a gun but a sword. However, rather than attacking enemies up close, you can swing your blade to release swirling energy projectiles over a short distance – not unlike Link's sword beam in the *Legend Of Zelda* series, except this still works even when you're not at full health. Meanwhile in other sections, you'll grab a special item and take continuous flight as the game imitates a horizontal-scrolling shooter.

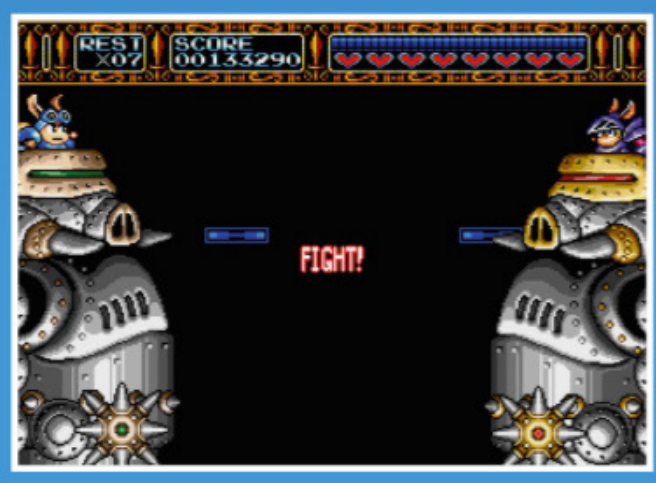
More unique to this game, however, is your rocket pack that you can charge up to fly in eight directions. Blasting around becomes important not just for attacking but also traversing otherwise unreachable areas, which you're taught early on when faced with a high wall. Then, while in a tighter indoor location, you learn you can fly at walls at a 45-degree angle to bounce off them to reach further heights. Once you're facing tougher enemies than the army of pig soldiers, rocket-charging quickly becomes par for the course, especially when you need to aim at weak spots just slightly out of reach from a tricky angle.

1 SHMUP-STER: Sparkster will occasionally fly into side-scrolling shooting sections that hark back to Konami's arcade shooters, with a couple overt references to *Gradius*. These stages aren't as bullet-hellish but they do feature some grand boss fights.



2 MINE CART: Honestly, what's a Nineties mascot platformer without a mine cart level? You'll have to duck spiky traps while other pigs in carts ride past trying to drop bombs, before events climax in a (literally) on-rails boss fight.

3 PLATFORM PUZZLES: There's a number of inventive platforming sequences in *Rocket Knight,* but a highlight is this underground volcanic cave where crossing the stage depends on you using reflections in a lowering and rising pool of lava.



4 MECH FIGHT: Of the many encounters with your arch rival Axel Gear, nothing's quite as novel as when he's pursuing you in a mech. Fortunately, you climb into your own for a robotic showdown. Watch those swinging arms!

» [Mega Drive] Defeat pig enemies and they lose their armour. Some even run around in a panic before their proper demise.

» [Mega Drive] Mid-bosses, like the Raccoon Robot, are as larger-than-life as the ones you encounter at the end of a level.

BOSS RUSH

HOW TO DEFEAT THE DEVOTINDOS EMPIRE'S MACHINES

FLEAGLE ROBOT

After facing the cowardly Captain Fleagle once, he next has his big robot do the fighting for him, from firing orbs to shaking down debris.

HOW TO BEAT THEM

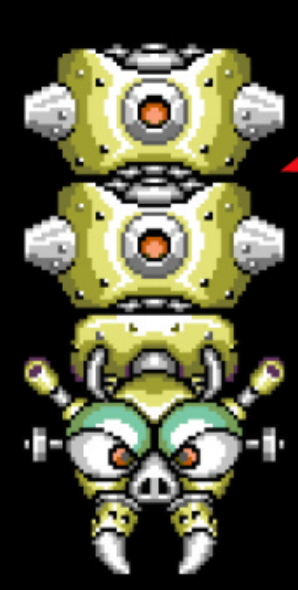
Use your rocket charge when its torso reveals a red orb. Once it's destroyed, Fleagle runs around after you, but he's a weakling.

PIG SPIDER

A misleading name as this boss is more like a mechanical snake with a sharp tail, though it does drop miniature explosive spiders after you.

HOW TO BEAT THEM

Rocket-charge the head when it pokes through holes from the walls or ceiling. Avoid the spiders and destroy the glowing one to detonate the rest.

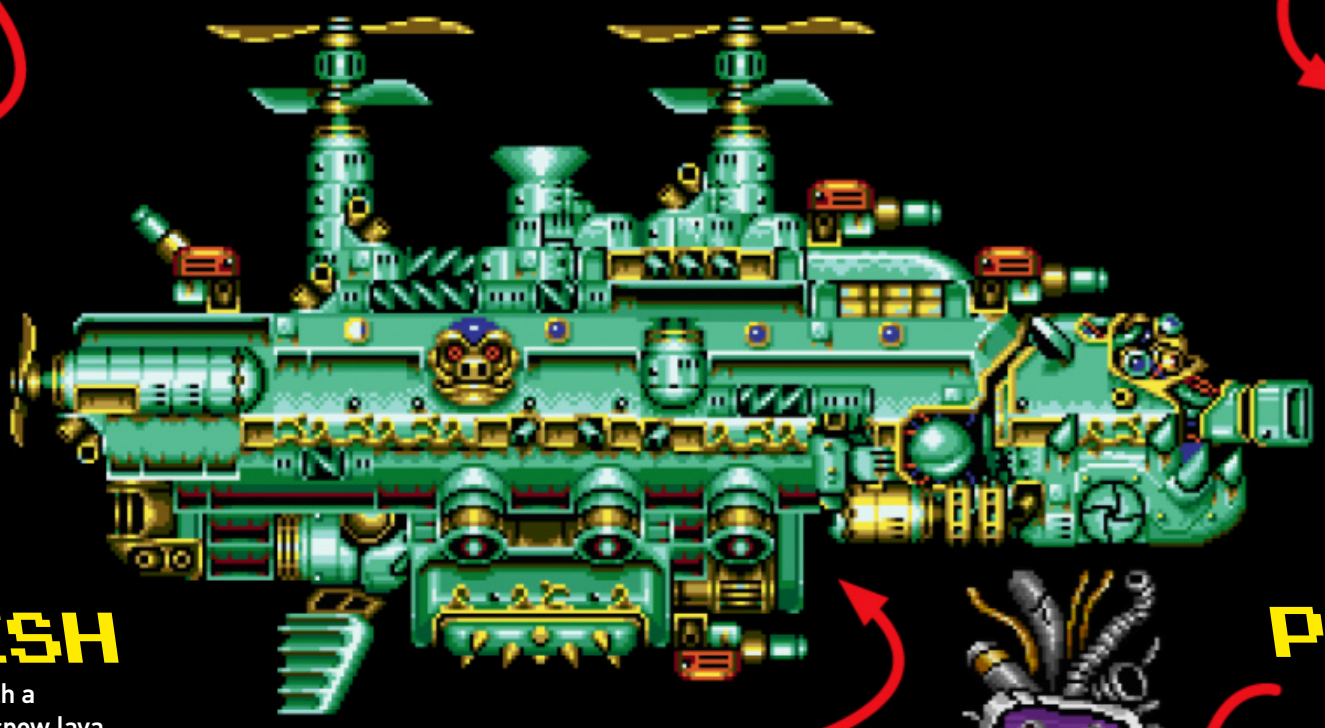


PIG TRAIN

This train, armed with projectiles as well as a pair of mechanical arms, pursues you through a tunnel from behind, above and in front.

HOW TO BEAT THEM

Just dodge the projectiles then follow up with a charge. Take care during the second phase of the fight, as only its hands are vulnerable to attack.



LAVA FISH

A large mechanical fish with a ravenous appetite. It likes to spew lava, though it also spits out bananas you can make use of.

HOW TO BEAT THEM

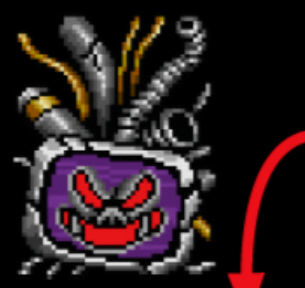
You can't hurt the fish itself, instead go after the red armoured pig who leaps out its mouth at the end of its attack phase.

PIG BATTLESHIP

A screen-filling boss that's both a flying and teleporting fortress. Even once you destroy most of it, it grows limbs to become a mech.

HOW TO BEAT THEM

Target the turrets then the glowing weak points from the hatch, jaw and neck. In its mech phase, stay in the top-left to avoid its flailing arms. Attack and focus fire on its chest core.



PIG STAR CORE

Not the most interesting-looking final boss but it packs some devious projectile attacks. In hard mode it comes after you with one final form.

HOW TO BEAT THEM

The bright-red weak spot is obvious but can appear from around any of its eight sides. The trick is to position yourself on its correct side.

Nonetheless, *Rocket Knight Adventures* is still very much a platformer at heart, and while its level design is mostly linear with only a couple of secrets that might lead to a much-needed extra life, it constantly mixes up the gameplay, even within a singular level. Just like an opossum does, Sparkster can use his tail to hang from branches and pipes, while there's also swimming sections where his tail can hang onto something to keep him from floating up when you're trying to dive deeper. It also had some very inventive use of visuals, which didn't just look terrific but provide their own gameplay quirks. For instance, in the second level, you'll traverse a mountain range with a waterfall in the background, and then discover certain platforms also allow you to go behind the cascade, which becomes key to getting past obstacles in the foreground. This kind of playful variety continues right up to the later levels where you're being pursued by invincible enemies and the only solution is to outrun them to the exit, or where you're controlling the up and down switches on a moving platform to navigate a room filled with spikes.

Mixed in with the inventive levels is also a smorgasbord of bosses. We don't just mean the end-of-level baddies (see 'Boss Rush') but also a dozen mid-bosses, which are frankly just as grand a spectacle with their own attack patterns and phases. Most of these take the form of robots or machines piloted by pigs from the evil Devotindos Empire, which itself has some overt references to the Galactic Empire from *Star Wars*, including its very own super weapon, the 'Pig Star'. The major highlight however is Sparkster's recurring rival Axel Gear, a former rocket knight gone rogue

» [Mega Drive] Hang in there! Sparkster demonstrates how he is more an opossum than Sonic is a hedgehog.

who, as the game's instruction manual tells us, was also responsible for killing Sparkster's adopted father and mentor Mifune Sanjulo.

***Rocket Knight Adventures* was a highly regarded title that avoided any labels as a *Sonic* also-ran, with scores of over 90% from both *GamesMaster* and *Mean Machines*.** In a 2014 retrospective for website *Sega-16,* Ken Horowitz goes as far to say it's "not only one of the system's best titles, it's one of the greatest platformers ever made". Sparkster was a perfect fit for the Mega Drive while also standing out from the blue hedgehog, and he also found a home in his own one-off series in the UK-made *Sonic The Comic*. Despite the overt Sega connection, there were apparently also plans to release a version for the SNES, which never materialised for unknown reasons.

A sequel, titled *Sparkster,* followed in 1994, which was released on both Mega Drive and SNES, although the former was the definitive sequel that continued the original story and also came with the subtitle *Rocket Knight*

» [Mega Drive] Switching from being in front of to behind the waterfall, and vice versa, is key to beating this mid-boss.

Adventures 2. Despite the same logo, box art and similar sprites, *Sparkster* on the SNES was actually a different game altogether. That wasn't unusual given both platforms also saw different versions of Disney's *Aladdin*, although in this case the second *Sparkster* was still developed by Konami but by a different team. While it had arguably improved graphics and was still rated favourably, it didn't capture quite the same magic as the original.

It's a shame that such a bright spark didn't go on to become a household name but it might have also been for the best that Sparkster packed up his gear early, as few mascots – not even Sonic – adapted well in the transition to 3D (pour one out for Gex, Croc and Blinx). A belated 2.5D revival in 2010 from the UK-based Climax Studios retains the original's perspective and gameplay, but the overhauled art style lacked the first game's expressive sprite work that was evident in both Sparkster's expressions and the defeated pig enemies. Ultimately, it's the Mega Drive original that still stands the test of time, and it sits proudly as the standard bearer for the mascot that gave Sonic a run for his money.

» [Mega Drive] The strong winds encountered on the Devotindos' flagship hamper your rocket boosts.

RGT

Retro Gamer Travels

LOST IN TRANSLATION

How the rest of the world experienced your favourite games

» [Dreamcast] The initial American release featured basic costumes and only the arcade stages.

USA

DEAD OR ALIVE 2

JPN → ROW
Japan → ROW

DEAD OR ALIVE 2
Departing: 2000

FORMAT
Dreamcast ■

DEVELOPER
Tecmo ■

YEAR
2000 ■

ORIGIN
Japan ■

LOCALISED FOR
Rest Of World ■

REASONS
Commercial, Sex/gender ■

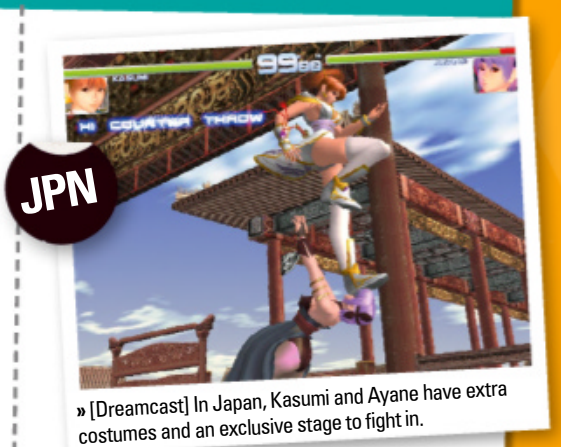
ECONOMY

■ **Tecmo's terrific 3D fighter had a very strange life on the Dreamcast, with every version given a different feature set.** The oddness starts with the fact that this game, developed in Japan, was first released in North America in February 2000. This was a fairly straightforward conversion of the original arcade game, with no unlockable content save for an intro scene that was disabled by default. If you wanted to see a nude Kasumi encased in some weird cloning blob, you had to achieve a high score in Survival mode, enter your name as REALDEMO and have your age set to at least 21.

Five months later in July 2000, the European version arrived. While this version lacked a couple of the bonus images included in the CD-ROM portion of the disc, the extra development time had given Tecmo the chance to add a set of extra unlockable costumes, with at least one for every character. These included some based on the developer's *Deception* series, as well as a *Shadowman*-themed costume for Zack made possible by Tecmo's publishing deal with Acclaim.

Japan finally got its own version in September 2000, and it was very clearly the definitive release.

The bonus images on the disc were completely new and a gallery mode was added to the game itself. Another new batch of costumes was added spanning every fighter, this time with more attention paid to characters with fewer options to help balance things out. And perhaps as compensation for having to wait so long, the Japanese audience also got extra gameplay features. New tag-team moves were added, as were two stages based on those from the original *Dead Or Alive*. Most importantly, final boss Tengu and throwback Bayman were added as playable characters. Oh, and that scene from the intro no longer needed unlocking.



» [Dreamcast] In Japan, Kasumi and Ayane have extra costumes and an exclusive stage to fight in.

» [Dreamcast] While Leon's pretty similar, Japanese players enjoyed having Bayman back in the fold.

» [Dreamcast] The American version doesn't offer any hidden unlockable characters, just the usual 12.

n

DECATHLETE

JPN → USA
Japan → USA

DECATHLETE
Departing: 1996

FORMAT
Saturn ■

DEVELOPER
Sega ■

YEAR
1996 ■

ORIGIN
Japan ■

LOCALISED FOR
USA ■

REASONS
Cultural, Commercial ■

ECONOMY

■ **It's fair to say that while it was a very enjoyable game, the arcade version of *DecAthlete* failed to account for racism.** While the Jamaican representative Femi Kadiena was broadly fine, the British athlete was a collection of stereotypes – a black man with exaggerated lips, a huge afro and a specialism in throwing events such as the javelin. Worst of all, he was named Robin Banks, a pun suggesting a criminal activity. It was clear that this couldn't stand and he was renamed Jef Jansens for the home Japanese and European release, titled *Athlete Kings*. Sega Of America felt that this measure didn't go far enough, and that it'd be better to cut him from the game altogether – leaving this version with only seven characters.

Another character was cut from the North American release – the hidden character Mankichi Kazami. This Japanese athlete was the star of the manga series *Decathlon*, and thus a sensible tie-in for a game like *DecAthlete*. With no recognition abroad, it wouldn't have made sense for Sega to maintain the licence for international releases, and he was also cut from the European release.

» [Saturn] With Jef gone, Americans are left with only the Russian athlete for throwing power.

» [Saturn] Jef's pretty happy with his world record here, but American gamers won't see it.

GAROU DENSETSU

JPN → ROW
Japan → Rest Of World

GAROU DENSETSU
Departing: 1991

FORMAT
Neo Geo ■

DEVELOPER
SNK ■

YEAR
1991 ■

ORIGIN
Japan ■

LOCALISED FOR
Rest Of World ■

REASONS
Difficulty ■

ECONOMY

■ **Consistency is particularly important when it comes to fighting game inputs.** If you're playing as a character you already know and love, jumping into the fray with them should be like sliding on a favourite pair of slippers. Imagine the consequences if you went to pull off the old reliable dragon punch, the way that every Ken player instinctively does, only to find that the Z-motion on the joystick no longer produced the desired result?

But *Fatal Fury* players have had to deal with this, as SNK inexplicably decided that the Bogard brothers and their mate Joe should have totally different move inputs in Japan and the rest of the world. Some moves were changed from quarter-circle motions to half-circle, or had the direction of travel reversed, while others were changed to something very different indeed. It's hard to determine the motivation for the changes, as they don't seem to make moves easier or harder to perform, and there were no real standards in the genre yet. In any case, fans outside of Japan had to relearn their characters from *Fatal Fury 2* onwards, as the international moves were dropped after the very first game.

» [Neo Geo] Quarter-circle backwards is odd for a fireball, but that's how Andy Bogard rolls in Japan.

» [Neo Geo] Everywhere else in the world, he uses the more common quarter-circle forward command.

THE MAKING OF

LURE OF THE Temptress

‘Tell Ratpouch to Interview Charles Cecil and then Write Four-Page Feature on Revolution’s First Game.’ ‘Certainly, sir…’

WORDS BY ~~RATPOUCH~~ LEWIS PACKWOOD

IN THE KNOW

- **» PUBLISHER:** VIRGIN INTERACTIVE ENTERTAINMENT
- **» DEVELOPER:** REVOLUTION SOFTWARE
- **» RELEASED:** 1992
- **» PLATFORM:** AMIGA, ATARI ST, PC
- **» GENRE:** ADVENTURE

The story of *Lure Of The Temptress* is also the story of Revolution, the British company that came out of nowhere to produce a point-and-click that stood shoulder to shoulder with games from Sierra and LucasArts, the American masters of the genre. But the birth of the company was somewhat precarious – and in the end *Lure Of The Temptress* only saw the light of day thanks to a few instances of sheer luck.

Revolution’s founder, Charles Cecil, left school in 1980 with ambitions to become an engineer. He won a sponsorship with Ford for his time at university, but his fate was changed when a fellow student, Richard Turner, told him that he had disassembled the ROM of his Sinclair ZX80, and was selling the listing. “We went to the pub, and we played *Space Invaders* together,” recalls Charles. “And we got on very well. And he was telling me about this videogame company called Artic that was just in its inception, and he said, ‘You’re good at telling stories. I’m going to write this system to allow people to play adventure games, why don’t you write an adventure?’”

» [Amiga] The lead machine for development was the Amiga, but *Lure Of The Temptress* was also converted to the Atari ST and PC.

» Charles Cecil founded Revolution Software in Hull in 1990, but the studio later relocated to York, where it’s still based.

DEVELOPER HIGHLIGHTS

BENEATH A STEEL SKY
SYSTEM: AMIGA, PC
YEAR: 1994

IN COLD BLOOD (PICTURED)
SYSTEM: PLAYSTATION, PC
YEAR: 2000

BROKEN SWORD: THE SLEEPING DRAGON
SYSTEM: PLAYSTATION 2, PC, XBOX
YEAR: 2003

» [Amiga] Frequent saving is vital – being caught somewhere you shouldn’t be will result in a swift punch to the face and a game over screen.

» [PC] The titular temptress makes a dramatic appearance on the Game Over screen. But in early versions of the game, there was no temptress at all.

Charles ended up penning several successful games for Hull-based Artic Computing while he was at university in Manchester. But by the time he left in 1985, the era of the bedroom coder was coming to an end as the games market became more professional. "I remember getting *Impossible Mission*," recalls Charles, "and realising it was so much better than anything that we could ever produce." Knowing that Artic couldn't compete with the well-funded companies that were emerging at the time, Charles left to set up Paragon Programming to produce games for US Gold. "And then they asked if I'd come and join as head of development," he says. "I was hugely flattered. I mean, this was one of the biggest software publishers in Europe." But he was in for a shock when he arrived. "I was expecting this team of people that I would be leading, you know, a really well-oiled machine. But there was me, a tester and a part-time masterer, and that was it."

He was then lured to become head of development at Activision on the promise that development would take priority over marketing. But as the Eighties drew to a close, the company was on the verge of bankruptcy. Just as Activision was going down, Sean Brennan, a friend of Charles' and deputy managing director at Mirrorsoft, got in touch. "He took me out for lunch and said, 'If you wanted to set up a new development company, we'd be keen to support you,'" remembers Charles. After years of frustration in having to manage other people's games, the idea of going back into development was attractive.

Charles' mother lent him £10,000 to start Revolution in 1990, which he supplemented with another £10,000 borrowed from the bank. The company he bought 'off the shelf' was called Turnvale, Ltd (which is why the town in *Lure Of The Temptress* is called Turnvale), and the founding team consisted of Charles, Noirin Carmody (who had worked as general manager for Sierra games at Activision; the pair would later marry), Tony Warriner and David Sykes. Tony was an old colleague from Artic who had gone to work for an aeronautical company when Artic closed down.

Like Artic, Revolution was initially based in Hull. "It was above a fruit shop in Chanterlands Avenue," says Charles, recalling that the tiny office was freezing cold in winter. The company started off with an Amiga and an expensive 386 PC that Charles had previously bought to play flight simulators, although the team quickly acquired a gas heater to complement the computer equipment. But the gas heater gave off such terrible fumes that they had to keep the window open while using it, and people took to wearing fingerless gloves while they worked. "It was dire, but we had no money whatsoever," says Charles.

Revolution decided to work on a point-and-click adventure, but with a more lighthearted tone. "At Activision, we distributed Sierra games," remembers Charles, "and I really enjoyed playing them, but my god they took themselves seriously." At the time, he wasn't aware of LucasArts and its drive to make funnier adventures: "We didn't even know about LucasArts. I'd never played a LucasArts game – I didn't actually play *Maniac Mansion* until much later."

However, Charles was no specialist at levity: "I was always writing serious stories, and always have done," he admits. To add the humour, Charles brought in Dave Cummins, who had been a tester at Activision. "I remember him writing a test report for an adventure we were publishing, and he wrote the test report so beautifully," recalls Charles. "It was so much better than the writing of the adventure itself."

They began working with a top-down system, says Charles. "I would write the story and the puzzle structure, and then Dave would finesse that with the programmer, particularly Tony Warriner, and they would work out, based on the puzzle structure, how to actually implement it." The team was rounded out with two artists – Stephen Oades and Adam Tween – along with long-suffering producer Daniel Marchant, "who spent four years in a row on his birthday sleeping on our office floor" notes Charles dryly.

After pulling together the initial concept for the company's first game, the next task was to pitch it to Mirrorsoft – and that meant hauling the company's precious, and only, PC down to London to give a presentation. The team dutifully wrapped it in a blanket and strapped it into the rear seat of the car for the drive to Charles' flat in London, where they were all staying on the night before the big pitch. Charles recalls that they had a few glasses of wine and went to bed much too late, and when he looked out of the window in the morning, he saw that someone had broken into the car – then realised to his horror that they'd forgotten to take out the 386 the night before. "The colour drained from my face," he says, "I

» [PC] Gaining entry to Selena's castle is no mean feat, and requires hours of puzzle-solving, deception and potions.

» [PC] 'What do you know about the Black Goat?' 'Nothing mate, you're asking the wrong fella.'

RETURN TO FORM

Charles Cecil on bringing back Virtual Theatre

"Ultimately, the problem with Virtual Theatre is that on a 2D screen, when the character goes off, you have no idea where they've gone," says Revolution head Charles Cecil. Although the ability for characters to have an apparent life of their own felt revolutionary at the time of *Lure Of The Temptress*' release, the problem was that you couldn't see them when they were going about their business elsewhere. And tracking them down in larger areas like the village was a nightmare. "You'd be looking for Mallin, and you didn't know whether he was going to turn up in ten seconds, or 20 seconds, or two minutes. And if you're walking in the same direction as him, then it will take even longer."

For this reason, Charles says they decided to cut back on Virtual Theatre for Revolution's second game, *Beneath A Steel Sky*, in which only one character – Lamb – had an off-screen routine. And the system was abandoned for the developer's third game, *Broken Sword*.

But now, with the release of *Beyond A Steel Sky*, Charles sees this as the perfect time to revisit the Virtual Theatre system. The sequel to *Beneath A Steel Sky* has come some 26 years after the original, and the technological advancements in that time mean that Virtual Theatre is a much more feasible concept this time around, chiefly due to the shift into 3D. "Being able to look around in the world, you can actually see what [characters are] doing, whereas in a 2D environment, you couldn't. So that was part of the vision for the game: to bring back this idea that I always felt had all this potential."

» [PC] 1992 proved to be a boom time for British-made, fantasy-themed point-and-click adventures, with Core Design's *Curse Of Enchantia* coming out just a few months after *Lure Of The Temptress*.

mean, we would never in a million years have been able to afford to buy another, they were so expensive. And I rushed out – and the thief had taken the car radio, but left the PC." If the ne'er-do-well had realised what was under the blanket in the back seat, Revolution could have had a very short history indeed.

The pitch went well, and Mirrorsoft agreed to back Revolution's first game. But the head of marketing, Alison Beasley, wasn't keen on the name, which at the time was a working title like "*Vengeance* or something equally crap" says Charles. He sent over a list of alternative titles, with *Lure Of The Temptress* right at the bottom, followed by 'this is a joke' in brackets. "And she phoned me up and she said, 'We love the name *Lure Of The Temptress*,'" recalls Charles. "And I said, 'Okay, but there are two problems: one, there's no luring, and two, there's no temptress.' And there was a silence. And she said, 'Can you put them in?'" The publisher argued that the game was too short anyway, and agreed to extend the deadline by four months and provide some extra money so the plot could be rewritten to include some luring and temptressing, as well as to make it a bit longer.

"I SAID, 'OKAY, BUT THERE ARE TWO PROBLEMS: ONE, THERE'S NO LURING, AND TWO, THERE'S NO TEMPTRESS'"
CHARLES CECIL

The big headline feature for *Lure Of The Temptress* was the Virtual Theatre system, whereby each of the characters would go about their routines in real time even when they weren't on the screen – and you could even ask your faithful servant Ratpouch to head into other rooms, fetch items and do various things for you. "That felt absolutely revolutionary," says Charles.

After beavering away on the game for months in secret, Revolution first showed *Lure Of The Temptress* to a select industry crowd at the European Computer Trade Show in London in 1991. Charles recalls it received an ecstatic response: "I demonstrated the ability to give commands, and then I stopped, and there was silence. And then somebody started clapping, and then everybody started clapping, and then people stood up, and then people queued because they wanted to talk

» [PC] Your faithful servant Ratpouch can be ordered to do all sorts of things through verb-based menu commands, and he's handy with a lockpick, too.

» [PC] This fearsome Skorl won't let Diermot into the town hall – you have to disguise yourself as the temptress Selena first.

» [PC] Charles Cecil began his games industry career by writing text adventures for Artic Computing in the early Eighties, like *Inca Curse* and *Ship Of Doom*.

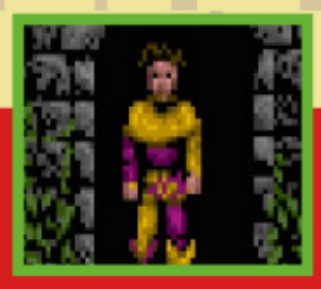
» [PC] The Severed Arms pub is about as inviting as it sounds. The sign outside explicitly bans singing, dancing and chickens.

MEET THE CAST

A few of the folks you'll come across in Turnvale

DIERMOT

■ Our erstwhile hero begins the game languishing in a prison cell guarded by a Skorl with a mean right hook.

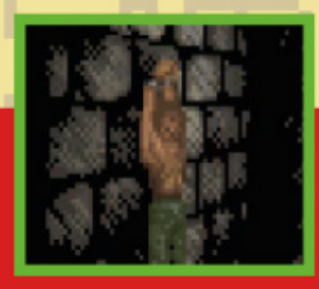


RATPOUCH

■ You find jester Ratpouch on a rack in the prison – it seems his humour didn't go down well with the powers that be.

SKORL GUARD

■ This meanie wants your 'gonads for gravy'. It's just as well you end up locking him in the same cell he's guarding, then.

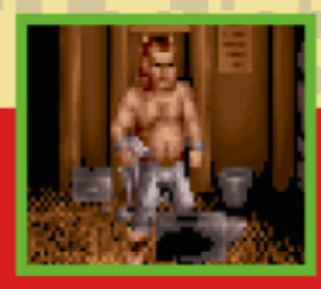


WULF

■ All this guy wants is water and instead you give him Skorl liquor. No wonder he expires shortly afterwards.

MALLIN

■ This green-coated rapscallion gives you a metal bar on your first meeting for express delivery.



LUTHERN

■ The burly blacksmith is keen to hear news of Wulf's fate and the whereabouts of Goewin. He also likes strong ale.

to me! And Bob Jacob [cofounder of Cinemaware] said, 'I love this game, we want to publish it in America' and somebody from a big Japanese magazine called *LOGiN* did a feature, and it was incredible. It was like, 'We've arrived, we've arrived.' And that was such a great moment."

Development went smoothly, and Charles was delighted at working with Mirrorsoft. "It was a great publisher," he says. But then Robert Maxwell, the head of the Mirror Group, plopped off his yacht in November 1991, and all hell broke loose. It quickly emerged that Robert had plundered the company's pension fund to shore up its share price, and the group plunged towards bankruptcy. There was a danger that the rights to *Lure Of The Temptress* could have ended up in the hands of administrators, but once again, Revolution had a lucky escape. "We had signed an agreement that if either party goes into administration, then the other can terminate – a clause that Mirrorsoft never imagined would ever be used against them," says Charles. This meant that Revolution could happily extricate itself from the demise of Robert's company. "We were very, very lucky," says Charles. "There's been so much serendipity." Mirrorsoft's Sean Brennan then moved to Virgin, and Revolution followed suit, signing a new deal with Richard Branson's firm.

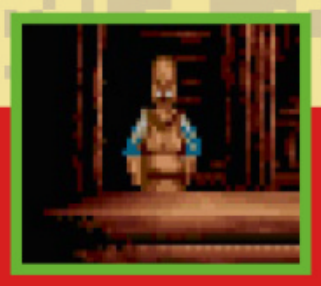
When *Lure Of The Temptress* was finally released in the summer of 1992, it received a warm reception: "The reviews were stunning," says Charles. In a 92% review, *Amiga Format* said the game surpassed "almost anything Sierra have offered, by being larger, funnier, and a whole lot better drawn", adding that its "innovative system knocks spots of the Sierra-standards and shows Lucasfilm a thing or two". And *Amiga Power* awarded the game 88%, calling it an "expertly written adventure" with "mouthwatering graphics and animation". *Lure Of The Temptress* was a big commercial success, too, hitting number one in the Gallup charts – although Charles says that Revolution didn't see much of that money. "We didn't earn any revenues, of course. Developers would get together after shows in the pub and talk wistfully about rumours that once a developer had earned a royalty from their game. Nobody actually knew any developers who had, but they knew somebody who claimed to know a developer that once got paid a royalty by a publisher."

Still, considering the success of *Lure Of The Temptress*, it's somewhat surprising that Revolution never made a sequel. Charles puts this down to Virgin driving them to keep creating new franchises. "We did pitch sequels," he says, "but Sean always wanted new games". Yet having just made a sequel to *Beneath A Steel Sky* some 26 years later, surely now is the perfect time to revisit Revolution's first game? "I could honestly say that it is not something that is top of my mind at this particular moment," torpedoes Charles. Shame.

» [PC] The introduction explains that human-eating Skorl ambush the King's party, killing him, while the unlucky Diermot is knocked unconscious and thrown into jail. This scene also inspired Revolution's logo.

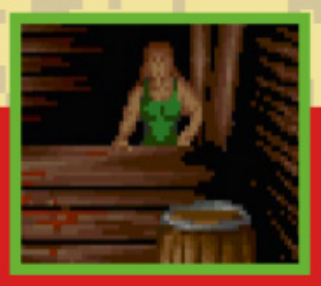
» [PC] Some citizens in Turnvale, like Ewan the shopkeeper, remain in the same place, but many of them wander from screen to screen on set routines.

» [PC] Charles says that they had a primitive sort of data network set up in their Hull office, whereby the programmers would throw floppy disks across the room.



EWAN

■ The village shopkeeper, Ewan, will attempt to sell you some mushrooms before remembering that he doesn't have any.

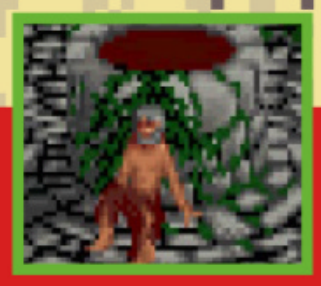


NELLIE

■ The landlady of the Magpie Tavern has a 'seductive swagger' and a penchant for scratching her armpit.

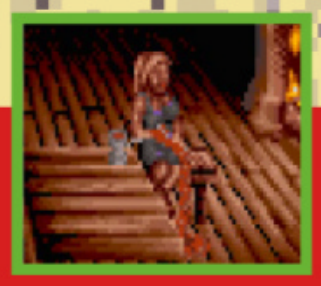
MORKUS

■ A filthy pubgoer whose eyes are 'red with drink and debauchery'. Bribe him to tell you where Goewin has been taken.



GRUB

■ This mysterious beggar chap likes to hang out nearby wells and perform poetry for any tourists passing by.



EDWINA

■ Edwina is a keen knitter with viciously plucked eyebrows and sidelines in subterfuge and book thievery.

GOEWIN

■ Diermot rescues Goewin by transforming into the temptress herself. She says thanks by helping him out with some spells.

Hardware Heaven

Neo Geo CD

» **MANUFACTURER:** SNK » **YEAR:** 1994
» **COST:** £399 (launch), £220+ (today, boxed), £150+ (today, unboxed)

The Neo Geo had always been a desirable piece of kit, but its reliance on expensive high-capacity ROM cartridges meant that it was a luxury few gamers could afford. CD-ROM had the potential to change all this, offering many times the capacity of even the largest Neo Geo cartridge for a fraction of the cost. To encourage adoption, the CD system was given some exclusive games, as well as arcade ports that never received home cartridge releases. But despite SNK's efforts, mainstream success was still not on the cards. The machine arrived just months before the Saturn and PlayStation, and lacked the 3D graphics capabilities of both. It was also more expensive than both machines due to the enormous seven megabytes of RAM used, and loading that RAM with game code was painfully slow due to the system's single-speed CD-ROM drive.

This model of Neo Geo CD is the only one to have been released worldwide. The black console features a flip-top disc tray lid and two standard Neo Geo control ports, allowing players to use either the included pads or their favourite Neo Geo sticks. Support for standard composite and S-video are included, as well as a port for RGB cables. ✱

SYSTEM SUPPLIED BY
EVAN AMOS

Neo Geo CD fact

■ The Neo Geo CD received about five years of official software support, with the final game *The King Of Fighters 99* arriving in December 1999, ten months after the penultimate game *The Last Blade 2*.

PROCESSORS: 16-BIT MOTOROLA 68000 (12 MHZ), 8-BIT ZILOG Z80 (4 MHZ)

RAM: 7 MB RAM (2MB PROGRAM MEMORY, 4MB GRAPHICS MEMORY, 1MB SOUND SAMPLE MEMORY)

GRAPHICS: UP TO 384 SPRITES (128 PER PLANE), 4,096 COLOURS ON-SCREEN FROM 65,536 PALETTE, 320X224 RESOLUTION

AUDIO: CD AUDIO, YAMAHA YM2610 SOUND CHIP

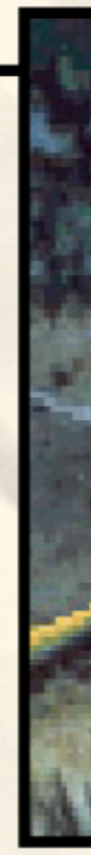
MEDIA: 650MB CD-ROM

STORAGE: 2KB BUILT-IN SRAM

ESSENTIAL GAME

Neo Drift Out: New Technology

This arcade racer is a perfect example of how the Neo Geo has more to offer than just fighting games, despite its reputation. The fast, furious rally action takes place across a variety of terrain types and beating the clock really requires you to master the alternate routes available. This game wasn't released for Neo Geo AES, so the CD release is the only official home version of this great game and thanks to licensing concerns over the inclusion of real rally cars, it's very likely that there will never be another. Plus, the loading times aren't too bad at all.



The History of Gabriel Knight

Words By Paul Walker-Emig

WE TALK TO FORMER SIERRA DEVELOPER JANE JENSEN ABOUT THE ADVENTURE SERIES THAT BROKE THE MOULD OF THE COMEDIC POINT-AND-CLICK AND WON ITSELF A PLACE IN THE LIST OF ADVENTURE GAME GREATS

» The team behind the original *Gabriel Knight* showcasing some strong Nineties looks. We approve.

» The team that worked through the difficult development of *Gabriel Knight 3*.

The three games that compose the *Gabriel Knight* series offer fascinating glimpses into the shifting trends and fortunes that defined the adventure game genre in the Nineties. Emerging out of the golden age of pixel art point-and-click classics in 1993, veering off to make a foray into the world of FMV in 1995, before making the tricky transition to 3D which so many of its contemporaries had to struggle with in 1999, this trilogy of adventure games tells the story of a genre in flux, as much as they do the tale of the supernatural investigations undertaken by the titular character.

"MY FATHER WAS A PROTESTANT MINISTER. I THINK I HAVE THAT SAME INTEREST IN METAPHYSICS AND LIFE AFTER DEATH AND THE BIG QUESTIONS AND ALL THAT, BUT I HAVE A CYNICAL SIDE WHICH LED ME MORE TOWARDS BEING INTERESTED IN THE PARANORMAL"
JANE JENSEN

Jane Jensen – creator, writer and director of the *Gabriel Knight* series – tells us that she got her start at fabled adventure game developer and publisher Sierra as a writer in the early Nineties, working on *Police Quest III* and *EcoQuest*, before getting the chance to codesign *King's Quest VI* with Sierra cofounder Roberta Williams. She evidentially impressed her enough that Sierra's other cofounder, Ken Williams, asked her to come up with an idea for a new series.

Jane tells us that her mind immediately went to a dark place. "I've always been a horror fan," she says. "My brother-in-law handed me *Carrie* when I was 12 years old. That started a huge love of horror all through high school. All those big horror novels, Stephen King and Anne Rice. I was really interested in the paranormal. My father was a protestant minister. I think I have that same interest in metaphysics and life after death and the big questions and all that, but I have a cynical side which led me more towards being interested in the paranormal. I've always read the *Fortean Times* magazine, Ed and Lorraine Warren were in *Gabriel Knight 3*, so I am really interested in that.

"I don't take it seriously in terms of I don't have an alter at home," Jane laughs, "I'm just curious about all of those subjects. For me as a writer, if I can find a subject I'm really fascinated about then I know I can put my heart into writing a story about it and can hopefully transfer that level of excitement or interest to the game player, too."

Jane explains that these interests were the foundation for what would become *Gabriel Knight: Sins Of The Father*. "My first thing was, 'What lends itself well to puzzles?' To me, that was an investigative game. I wanted to do an investigator,

» [PC] The eclectic and struggling bookshop owned by Gabriel Knight serves as his base of operations in *Sins Of The Father.*

» Jane Jensen is also known by her pen name, Eli Easton.

» [PC] Though the first game in the series certainly leans into the spookiness of vodou, it also pays heed to its real history and practice as a religion.

» [PC] The first game takes place over a number of days, with each day moving forward after you've completed a certain number of puzzles and events.

Character Study

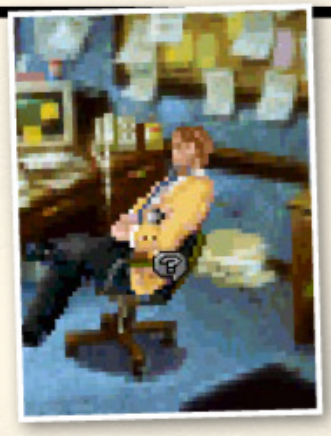
MEET THE PLAYERS THAT PROPEL JANE'S STORIES

GABRIEL KNIGHT

This struggling bookshop owner starts the series as a roguish womaniser with a seemingly permanent hangover and a penchant for vodou mysteries. He never quite loses his cheeky charm, but does take his destiny as a guardian against supernatural threats more seriously as the series rolls on.

GRACE NAKAMURA

With a sarcastic wit that plays nicely off Gabriel, Grace is the perfect foil for the protagonist. Grace helps out with research from Gabriel's bookshop in the first game, but takes a more central role as a playable character in the subsequent titles.



DETECTIVE MOSLEY

Played by the famous Mark Hamill in the first game, Detective Franklin Mosley is a childhood friend of Gabriel's and his contact inside the police force. Though showing himself to be a competent cop, he isn't the brightest, leaving him open to manipulation from Gabriel.

BARON FRIEDRICH VON GLOWER

With a elaborate and fun name like that, how can you be anything else but a top-class villain? Suave and sophisticated on the surface, he's later revealed to be a werewolf.

MALIA GEDDE

Charismatic, mysterious and embroiled in the vodou underworld of New Orleans, Malia is a source of intrigue for both the player and Gabriel, who finds himself falling in love with her, introducing us to a new side of the shallow Gabriel we are used to.

GERDE HULL

The maid at Schloss Ritter, Gabriel's family's ancestral home, Gerde is one of the few characters to appear in all three games. She bears the unfortunate brunt of Grace's misconceived jealousy in *The Beast Within*, but the pair end up working well together.

THE VILLAGE ELDERS GATHER AT THE SITE OF A BRUTAL, RITUALISTIC MURDER.
"WHAT SAYEST THOU, MAYOR CRODWELL?"
ALL EYES TURN TO A SHORT, SQUARE MAN...
"NOT AGAIN!"
"THIS IS THE SIXTH..."
"I SAY... DEVILS FROM HELL ARE AMONG US!"
"TIS WORSE THAN THE TROUBLE THEY HAD UP NORTH."
"...MOTHER OF GOD PROTECT US!"

A Novel Direction

How Gabriel became a comic book and literary protagonist

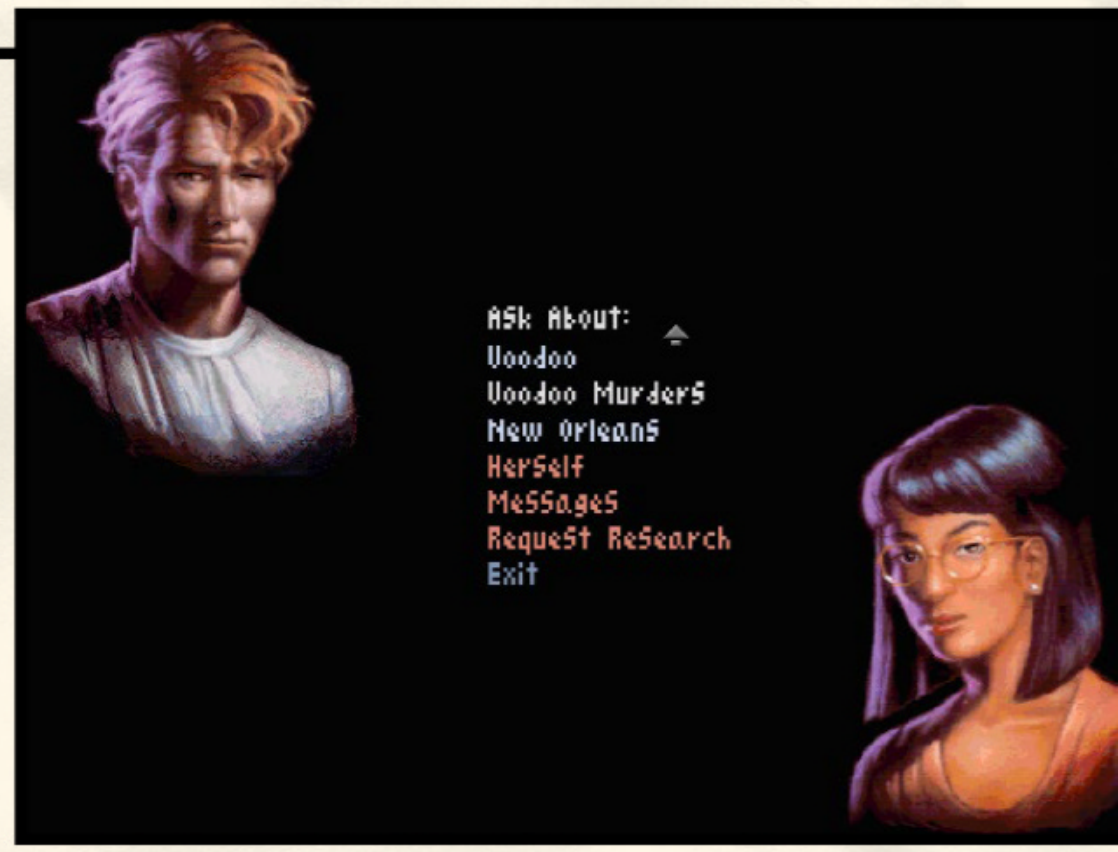
Given the literary ambitions of creator Jane Jensen – she has gone on to publish a host of novels, primarily under the name Eli Easton – it's unsurprising that *Gabriel Knight* has made the transition from pixels to print. The original 1993 version of *Gabriel Knight: Sins Of The Father* came with a 33-page graphic novel set 200 years before the game, fleshing out the series' mythos in an appropriately dark art style, illustrated by Terese Nielsen. In 1997, a full novelisation of *Sins Of The Father* was released. This stuck faithfully to the events as portrayed in the game, an approach Jane later regretted, stating that it was not the best way to introduce a literary audience to the series. That novel, the aforementioned graphic novel and a new 20-page graphic novel set a few days before the then soon-to-be-released *Gabriel Knight 3: Blood Of The Sacred, Blood Of The Damned*, were all included as part of the 1998 *Gabriel Knight Mysteries: Limited Edition*, a compilation of the first two games in the series. Jane took a second stab at novelising one of her games in 1998 with *Gabriel Knight: The Beast Within*. Learning a lesson from her novelisation of the first game, Jane allowed herself the freedom to deviate from the events depicted in the game, retelling the story in a fashion she thought would be more appropriate for a literary version of the werewolf mystery.

▶ but I wanted to do paranormal mysteries. Initially, I thought about doing Gabriel as a paranormal professor, an Indiana Jones of the paranormal. But as the idea for the first story developed, which was the vodou story set in New Orleans, his character changed. I wanted him to be down on his luck, struggling. It really didn't make sense for him to be a professor."

Jane tells us that this concept wasn't particularly well-received when she pitched it to Ken Williams. "At that time, all the Sierra stuff was pretty light and humorous," Jane recalls. "When I pitched *Gabriel Knight*, Ken's direction was, 'Well, I'll let you do it but I wish you would come up with something funny because I don't think this is the right way to go.'" Jane explains that though Ken wasn't completely on board with her idea, Sierra was the kind of environment where she was given the freedom to follow her vision.

"In those days at Sierra, the designers were promoted like a book author would be and we had a lot of autonomy," Jane recalls. "Ken's approach was, 'You're the creative director, it's your baby. I'll let you have creative freedom, but if it doesn't sell, you'll never design for me again.' The companies I've dabbled with since, there's much more of 'it's a team, it's designed by committee'. There's a lot of marketing input, less of that autonomy. It was really idyllic for a creative atmosphere at the time."

Harnessing that creative freedom, Jane and her team would conjure a rich and atmospheric vision of a New Orleans steeped in the culture of vodou. As would become characteristic of the series, *Sins Of The Father* showcased a genuine and well-researched interest in its paranormal themes – all too rare within videogames. Learning about how vodou has adapted to assimilate other religious cultures or the concept of being ridden by vodou gods, or loa, was both fascinating and provided a solid base for the game to embellish into the more extravagant territory of the supernatural effectively.

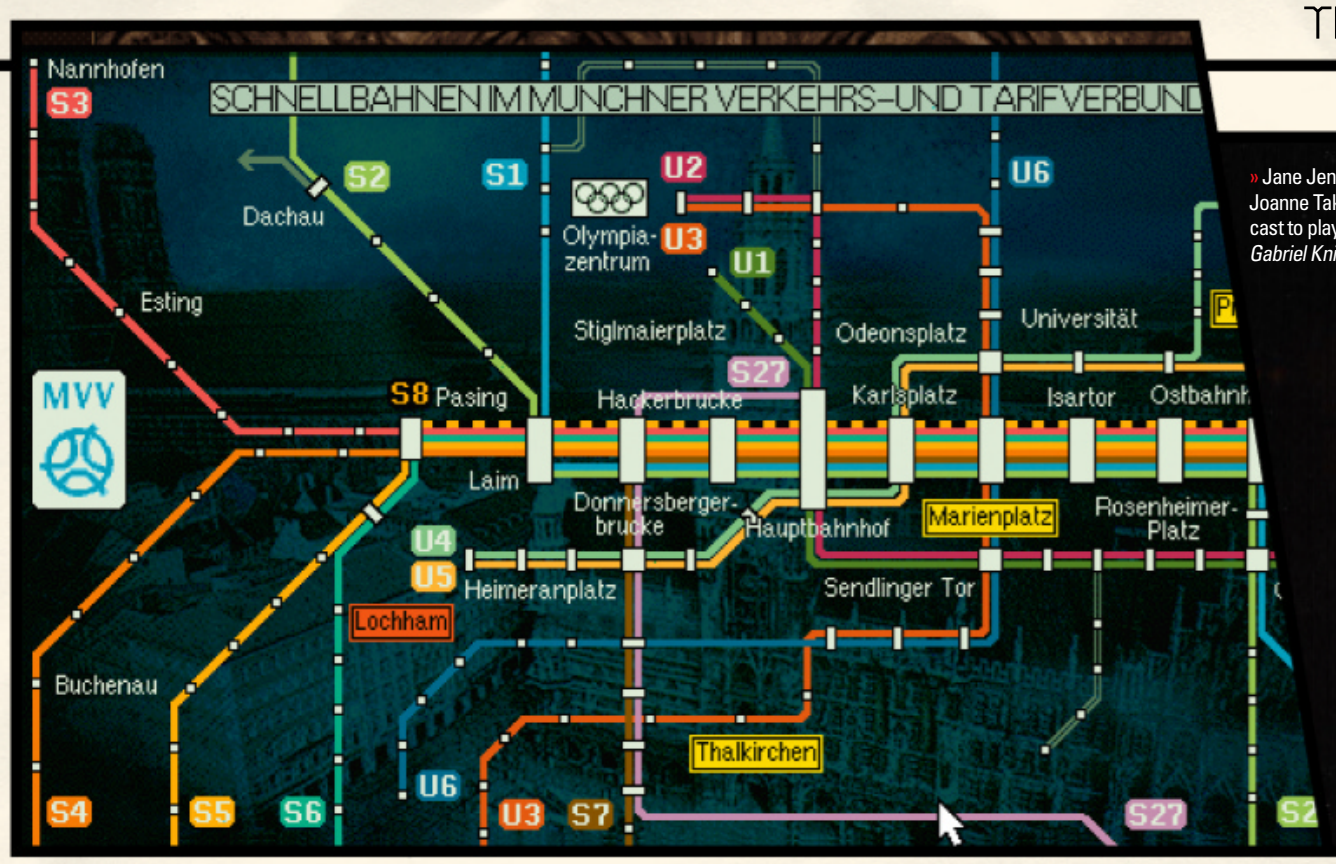


» [PC] The talking head conversations in *Sins Of The Father* were a nice touch and let you see characters in more detail.

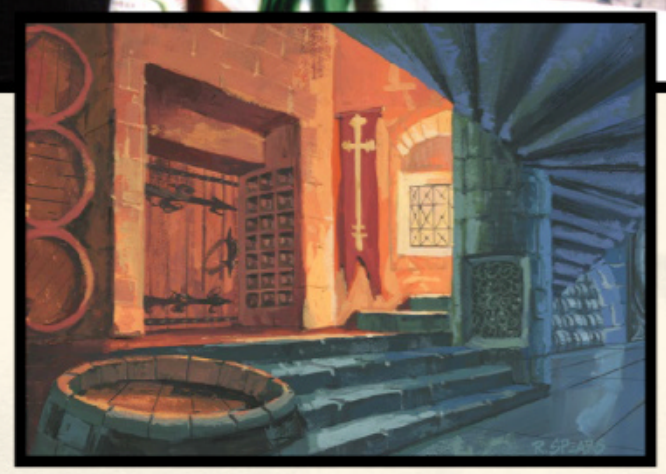
» This behind-the-scenes shot was taken at Sierra's own studio – originally built to film scenes for *Phantasmagoria* – during the filming of *Gabriel Knight 2*.

» [PC] *Gabriel Knight 2* makes use of many of Munich's most famous sites, including the city's much-visited Marienplatz.

» [PC] Supernatural investigations still require a bit of science… especially when you're dealing with potential werewolf hair.

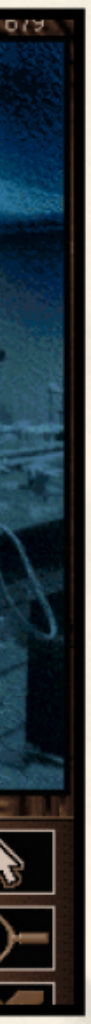


» Jane Jensen hanging out with Joanne Takahashi, who was cast to play Grace Nakamura in *Gabriel Knight 2*.



» A piece of concept art for a scene from *Gabriel Knight 3: Blood Of The Sacred, Blood Of The Damned*.

» If you recognise Dean Erickson – the actor that played Gabriel Knight in the second game – from somewhere else, it is perhaps from his brief appearances as a waiter in *Frasier*.



Jane notes that the game's profile was boosted by a surprisingly famous cast including Mark Hamill, Tim Curry, Leah Remini and Michael Dorn, which she attributes to fortunate timing. "We weren't the first game to do voice-over, but we were very early, so we were just at the stage where actors and directors were starting to go, 'Hmm, this might be something.' We hit a sweet spot where we got a lot of these actors for basically minimum SAG rate." Jane tells us that experienced Hollywood voice director Stu Rosen was brought on for the project, bringing with him an impressive contact list. "We listened to maybe 30 auditions for Gabriel Knight and none of them were right. He had to be kind of cocky and have that sarcastic humour, but he had to be likeable. Some of the auditions, it was just like, 'This guys a jerk.'" Stu suggested famous British-born actor Tim Curry, which seemed unusual to Jane given that Gabriel required a thick New Orleans drawl, but he assured her that Tim could do it. "He got him to read for it and I was just like, 'Oh man, absolutely, let's do this.'" Jane reveals that there were also problems with the casting of Grace. "I was in the studio when the person who was reading for Grace did her first day and it was just not right at all. After she left, Stu was like, 'Maybe I can get Leah Remini?' At the time she was in a pretty big TV series, but he got her to do it.

> "WHEN I PITCHED GABRIEL KNIGHT, KEN'S DIRECTION WAS, 'WELL, I'LL LET YOU DO IT BUT I WISH YOU WOULD COME UP WITH SOMETHING FUNNY BECAUSE I DON'T THINK THIS IS THE RIGHT WAY TO GO"
> JANE JENSEN

Despite being a departure from the light-hearted adventures produced by Sierra, Jane recalls *Gabriel Knight* receiving positive press that seemed to justify its direction. "We scrambled to get the first day ready as a demo for a big conference and we passed them out to reporters on eight-and-a-half-inch disks," Jane remembers. "We really were championed by Johnny Wilson at *Computer Gaming World*. He loved it. He came out to Sierra to spend the day with the team and we got a front cover. He was really helpful for making the game very visible. We got great reviews, a lot of press coverage, several covers. It was pretty nice."

Ken Williams' concerns about the game's lack of humour were, it turns out, unfounded. *Sins Of The Father* was a big critical and commercial success, launching Sierra quickly into development of *Gabriel Knight 2: The Beast Within*.

The sequel was something of an inversion of the first game. Where *Sins Of The Father* broke new and uncertain ground in terms of tone and story, laid on a familiar technological foundation of pixel art and a graphical UI largely in step with the Sierra titles that had preceded it, *The Beast Within* carried a cast of characters and a paranormal story which the first game had proven could be successful into a project built on the new technological frontier that was live-action FMV.

"That really wasn't my call," says Jane on the logic behind the switch. "At the time I was writing *Gabriel Knight 2*, Roberta Williams was producing *Phantasmagoria*, which was the first live-action videogame Sierra did. Ken Williams was always looking at new technology. His opinion was, which is totally true, 'If we are going to spend a million dollars to make a game, we don't want it to be old before it even gets out the door.' It was a decision handed down to me that *Gabriel Knight 2* would be full-motion video. I was excited about it. I thought it was cool to be able to work with live actors and use the latest tech.

"We had a director," continues Jane on whether working with actors presented her with any new challenges. "I think the challenging part was more technical. Every single thing had to be filmed. If Gabriel walks to the door and opens it, that had to be a filmed scene in the script, so everything had to be broken out. There was that aspect of it, then having to think about how you can do something like Grace's dream where she's running thorough the snow and she sees wolves and there's a horse in it. There are things that would be much easier to produce with an artist than on a sound stage.

» [PC] *Gabriel Knight 3* featured a free-moving camera that you could fly around its environments. It feels unusual now, but it's important to remember that the conventions of 3D were not firmly established at the time.

» [PC] As is always the case in *Gabriel Knight*, you can't trust what everyone tells you. There are plenty of secrets being hidden.

▶ "The casting was really difficult," Jane continues. "Especially coming off of Tim Curry and Leah Remini. There was no way we could afford actors of that calibre. Also the scope of it. I think the script was 1,000 pages. There was originally a chapter where you played as Ludwig inside his castle and that had to go because the scale of the production was huge as it was."

As well as making a radical technological switch, *The Beast Within* made another significant leap in terms of its setting, moving from New Orleans to southern Germany. "I had lived in Munich for nine months," Jane explains. "I had been to Ludwig [II]'s castle and got really into him. I wanted to set a game in Bavaria. I loved that atmosphere, but then I had to think of what is the supernatural element that Gabriel's investigating?" Jane explains that werewolves, vampires and witches were all on the table, but that she felt werewolves worked best with the setting and a character arc kicked off with Gabriel as a womanising, carefree partier. "By the end of the first game, he realises that he has this purpose and he's supposed to fulfil this family destiny and he has to become a person who cares about helping other people. Part of the werewolf theme was about facing the inner hedonist. This temptation to just fall back into sex and pleasure and primal behaviour as opposed to the higher good. Werewolves really worked with that idea."

Though FMV proved to be a relatively short fad, it didn't hurt *The Beast Within*. "I think it did about the same in terms of sales as [the first] *Gabriel Knight*," Jane recalls, "which is good for the second in a series." This led into development of *Gabriel Knight 3: Blood Of The Sacred, Blood Of The Damned*, which would present a new set of challenges and see Jane having to navigate far rougher waters.

CUC, which had purchased Sierra in 1996, was enveloped in an accounting fraud scandal in 1998, prompting a sale of Sierra to Havas Interactive. Under new management, the company's headquarters was moved to Seattle, the business was reorganised and staff were laid off. This backdrop of uncertainty at Sierra was compounded by a general sense of precariousness about the future of the adventure game genre. "3D shooters had broken upon the scene in a big way. I think the real question at the time was, 'Do we even want to do adventure games any more?'" Jane says on the company's response to the explosion of 3D gaming.

SINS REVISITED

HOW THE 2014 20TH ANNIVERSARY EDITION REIMAGINES A CLASSIC

VODOU IT AGAIN
The biggest and most striking change is the completely reworked graphics, which take familiar scenes and characters and render then in 3D.

MUSICAL MAGIC
Robert Holmes returns to give his incredible soundtrack – including its banging main theme – a rework, with remastered versions of all the game's music.

NEW-I
The game's UI has been changed to simplify and modernise it – a nice quality-of-life tweak.

RESTYLED
Gabriel's hair is a little different in this new version. Presumably, his parting has wondered to closer match the style of the actor that played him in *The Beast Within*.

2D TOUCH UP
As well as the 3D rework of the game's graphics, its 2D comic book-style cutscenes have also been redone to complete its modernisation.

DIRECTOR'S CUT
As well as faithfully replicating everything that appeared in the first game, this version adds a few new scenes and puzzles.

BEHIND THE SCENES
This version of the game includes a bunch of extra content, including concept art and developer interviews.

"They just basically took over the whole market. Adventure games fell out of favour very quickly."

Despite this uncertainty, *Gabriel Knight 3* was greenlit and the decision was handed down that it should make the move to 3D. "I would have liked to have done it in live-action," says Jane, "but that wasn't even on the table."

Jane reveals that she got the idea for *GK3*'s story after reading *The Holy Blood And The Holy Grail*, a book full of speculation about Jesus' bloodline, secret societies and lost treasures. "I just dove into it head-first and got every book I could find on the subject," Jane says. "It really worked with the mythos of Gabriel Knight's family. Then I had to have some kind of supernatural element, so ended up pulling in vampires. It's kind of crazy!"

The unstable situation at Sierra and the struggles that the adventure genre was facing in the late Nineties meant that Jane's passion for the subject wasn't well-reflected in the development process. "It was a much more long and painful process to get the third one out," Jane remembers. "We went through three producers. Even the team, you could really tell the difference. On *Gabriel Knight* and *Gabriel Knight 2*, the team really believed in the project. They were really passionate. On *Gabriel Knight* 3 it felt like it was kind of a slog. People weren't really that engaged in it. It felt like I had to push it uphill a lot more than the first two games."

> "ON GABRIEL KNIGHT 3 IT FELT LIKE IT WAS A SLOG. PEOPLE WEREN'T REALLY THAT ENGAGED IN IT. IT FELT LIKE I HAD TO PUSH IT UPHILL A LOT MORE"
> JANE JENSEN

Though 3D wouldn't necessarily have been her own choice, Jane tells us she thought carefully about how to best employ the new technology. "I really didn't want to get into bringing a lot of action into it like they had tried with *King's Quest VIII*. It just didn't seem like that was the right way to go," she explains. "For me, it was about making puzzles more geometric and more spatial. We had that whole La Serpent Rouge puzzle in *Gabriel Knight* 3 which was about landscape and using viewpoints. I tried to use the abilities of 3D to make interesting new puzzles."

The game again received positive critical praise, but emerging in a context where adventure games were a dying breed, it had little chance of commercial success, signalling the end of what Jane had always hoped would be a long-running series.

"I think even before it shipped it was clear the company was going in a different direction," says Jane. "The management changed and they were all about doing 3D shooters. I tried to pitch *Gabriel Knight 4* after *Gabriel Knight* 3 came out but it wasn't really happening. I had a couple of ideas," Jane reveals. "Scotland was in there at one point, I wanted to do witches for sure. If there's a publisher that would invest the money in creating it I would love to design it, but I'm not holding my breath," says Jane on the possibility of reviving the beloved series.

The chances of a *Gabriel Knight* return do indeed seem slim, but there's no doubt that the series made a well-deserved impact. In delving head-first into darker territory, *Gabriel Knight* was a pioneer that's earned its spot in adventure game canon and left a deep impression on players sucked in by its tantalising mysteries and richly conceived paranormal mythology. ✱

Screamer

IT'S NOT THE GAME IT USED TO BE

» PC » 1995 » GRAFFITI

I've extremely fond memories of Graffiti's *Screamer*. Seen at the time by many PC owners as their answer to the PlayStation's *Ridge Racer*, its sensational visuals – which were all the more impressive when you realised it was released before the adoption of 3D graphics cards – meant it was as demanding on your PC as the top courses were to navigate.

While I did most of my gaming on my Saturn at the time, I still enjoyed playing *Screamer* on my PC thanks to its similarities to *Ridge Racer* – the brash announcer, colourful visuals and abundant use of planes and helicopters – and the extra modes that included slalom options and cone takedowns in addition to the staple time attack mode. I didn't own a cutting-edge machine at the time, though, so I never felt I was getting the best out of the game, but I still managed to have fun with it.

A recent purchase of a new PC – which while not cutting edge, certainly makes my modern consoles look rather basic – has seen me return to many of my old games, and *Screamer* was one of them. I was eager to see how ridiculously far I could push the game on my new rig (I *think* they call it a rig) but I had something of a rude awakening, as returning to the past, in this case, was something of a shock to the system.

While GOG (which currently sells it) has a rather excellent and helpful online community, my inability to navigate Windows 10 and find the required config files that are recommended to be tweaked has meant I've been unable to make numerous important adjustments for an arcade racer. You know, things like tweaking the speed to better match the Pentium system that was recommended at the time, or adding an all-important option to use my Xbox 360 joypad. I'm sure it's more down to my own inability to follow simple instructions, but it has taken the shine of Graffiti's racer somewhat.

It still moves at a decent rate, but it feels twitchier than I remember, and playing with the cursor keys is taking a *lot* of getting used to. Hopefully, I'll be able to find those blasted files so that I can use my pad. As it stands, *Screamer* currently plays better in my memories than it does in reality.

Megaca
5
4
3
2
1
0

LAP
1/3
POSITION
10
8
TOTAL
00:34:02
LAP TIME
00:34:02
BEST LAP
01:03:52
RPMX1000
Km/h
GEAR
193
6

LAP
1/3
POSITION
7
20
TOTAL
00:21:90
LAP TIME
00:21:90
BEST LAP
03:00:00
RPMX1000
Km/h
GEAR
287
6

LAP
2/3
POSITION
5
30
TOTAL
00:48:96
LAP TIME
00:10:66
BEST LAP
00:33:88
RPMX1000
Km/h
GEAR
267
6

SO YOU WANT TO COLLECT...

XBOX GAMES

With a new console on the horizon, it feels like the perfect time to revisit Microsoft's original Xbox, particularly as several of the featured exclusives here will be playable on the Xbox Series X

Words by Darran Jones

PERIPHERAL POWER

STEEL BATTALION

DEVELOPER: CAPCOM PRODUCTION STUDIO 4, NUDE MAKER
RELEASE: 2002

It's fitting that this Xbox exclusive from Capcom, which features hulking mechs and a imposing unique controller, has a price tag that's suitably intimidating. Created by Capcom Production Studio 4 and Nude Maker, and overseen by producer Atsushi Inaba, *Steel Battalion* has become a centrepiece for many Xbox collectors as it's just such a cool game to own. The appeal comes from the ridiculously oversized controller that manages to offer a deep, tactile and unique Xbox experience. You don't play *Steel Battalion*, you *feel* it, and the sensation of starting up your Vertical Tank for the first time is a memory not soon forgotten. There's a price tag for that memory though, and it's not pretty. No matter what region you buy from, *Steel Battalion* will cost you. The game on its own tops out at £80 for a PAL copy, but you'll be looking at a minimum of £140 for a boxed version, with prices climbing even higher for mint copies. The US game is pricier, while the Japan version is cheap but has a language barrier.

» [Xbox] Those many dials and buttons aren't just for show so pay attention to them.

MECHA MONEY

Things to keep in mind if you want Capcom's mech shooter in your collection

Screw It
The screws and covers used to hold the *Steel Battalion* unit together often go missing, so make sure the one you're buying has them included.

Blue Or Green?
Steel Battalion has two versions. The original has green buttons and parts that wear down easily, while the second revision sports blue buttons.

Buyer beware
If you fancy *Line Of Contact*, *Steel Battalion*'s sequel, just be aware it's online-only. It's playable using Xlink Kai, but requires great effort.

It's all in the name
If you really must own a Japanese version of *Steel Battalion*, be sure to search for copies of *Tekki*, as that's what it's known as over there.

THE X STANDS FOR XTRA

TONY HAWK'S PRO SKATER 2X

EXPECT TO PAY £8+ (USA)

DEVELOPER: NEVERSOFT, TREYARCH
RELEASE: 2001

Only serious Xbox collectors are likely to be aware of *Pro Skater 2X* as it was an American exclusive which launched a few short weeks before *Pro Skater 3*. *2X* is basically a greatly enhanced version of *Pro Skater 2*, which debuted the previous year. It ups the ante significantly by greatly improving the visuals, catering for four-player multiplayer games (with the ability to link two systems together for eight-player japes) and a number of exclusive levels, including a very trippy London nightclub. It also adds the campaign mode from the original *Pro Skater*, too, making it tremendous value for money. Fortunately, it's relatively cheap to get hold of, with copies starting from £8. Just be mindful of postage costs as well as potential import charges, and if your machine can run it.

» [Xbox] It lacks the revert move from *Pro Skater 3*, but *2X* remains trick-heavy.

» [Xbox] Having the full campaign from the first *Pro Skater* is a nice bonus.

DRIFTING BLISS

OUTRUN 2

EXPECT TO PAY £3.50+ (EUROPE)

DEVELOPER: SUMO DIGITAL, SEGA AM2
RELEASE: 2004

The inclusion of *OutRun 2*'s courses in *OutRun 2006 Coast 2 Coast* means many gamers seem to ignore this true Xbox exclusive. That ignorance has kept prices surprisingly low and it sells for a fraction of the price that *Coast 2 Coast* currently commands. We'd argue it remains worth adding to your collection for a number of reasons – mainly the inclusion of *Out Run* as an unlockable extra, two unlockable tracks from *Scud Race* and *Daytona USA 2*, and the fact that the challenge missions remain plenty of fun. That fun doesn't require deep pockets, either, as the PAL version starts at £3.50 and rarely passes a tenner. The US version ranges from £8 to £25, while the enhanced Japanese edition is more in line with *Coast 2 Coast*'s current price and fetches up to £90!

EXPECT TO PAY £8+ (USA)

» [Xbox] Powersliding around corners still fills us with immense joy.

EXPECT TO PAY £57+ (JAPAN)

» [Xbox] The available Ferraris all handle differently to one another.

THE ORIGINAL AND BEST

HALO: COMBAT EVOLVED

EXPECT TO PAY £0.50+ (EUROPE)
EXPECT TO PAY £9+ (JAPAN)
EXPECT TO PAY £3+ (USA)

DEVELOPER: BUNGIE
RELEASE: 2001

Unless you really despise first-person shooters, Microsoft's legendary system-seller absolutely needs a place in your precious collection. *Halo* had two years of exclusivity before being ported to PC and Mac, and Microsoft used that lengthy window to push it on Xbox owners the world over. Perhaps the greatest aspect of Bungie's magnificent first-person shooter is that when you sell over 5 million units there are more than enough copies of the game to go around, meaning prices (for the most part) are extremely reasonable. If you fancy a gamble, you can order it from CEX for an absurdly low 50 pennies and hope it comes complete. Otherwise, prices start at a quid and top out at a fiver, with the Classics edition typically reaching that higher price point. An American copy is £3 to £8 without postage, while the Japanese version is the most expensive and starts at £9.

» [Xbox] *Halo*'s chattering soldiers helped bring its world to life.

» [Xbox] Commanding vehicles like the Banshee remains a lot of fun.

MORE MASTER CHIEF

There's a variety of Halo titles to pick up for Xbox. Here's a few of them

Halo 2

This is similarly priced to the first game, although it also has a slightly pricier steelbook edition that's worth seeking out. While its online and multiplayer aspects are greatly improved over the original game, not everyone was a fan of the Arbiter's introduction as a playable character or the cliffhanger ending.

EXPECT TO PAY £1+ (EUROPE)
EXPECT TO PAY £5+ (JAPAN)
EXPECT TO PAY £2+ (USA)

Halo 2 Multiplayer Map Pack

While Xbox Live was a big success, plenty of people never used it. As a result, Bungie released this collection which allowed offline Xbox owners to experience new maps and add updates they otherwise would have missed out on. It's available to buy from as little as £1.20, with the US version being the most costly.

EXPECT TO PAY £3+ (JAPAN)
EXPECT TO PAY £4+ (USA)
EXPECT TO PAY £1.20+ (EUROPE)

Halo Triple Pack

This compilation features *Halo, Halo 2* and the map pack, and its prices are all over the shop. You'll typically be able to buy it for a reasonable £15, but if you want a sealed one you'll end up spending far more money. A mint copy recently sold for an eye-watering £499! US copies start from £18.

EXPECT TO PAY £15+ (EUROPE)
EXPECT TO PAY £18+ (USA)

COLLECTING TIPS!

The Classics
■ The Xbox has its own 'Classics' collection and while many games are the same price as the original editions, there are variances, so keep that in mind.

Mod Away
■ The Xbox is a highly moddable console, granting you easy access to NTSC exclusives. Soft-mod options are available if you balk at opening your console up.

That Hertz
■ A good number of PAL Xbox games support PAL60 mode, meaning many games will run just as fast as their NTSC counterparts, which saves importing them.

Forward Thinking
■ Titles like *Panzer Dragoon Orta*, *KOTOR*, *Ninja Gaiden Black* and *Conker* will be compatible with the upcoming Xbox Series X. Expect their prices to rise accordingly.

MECHANISED MAYHEM

METAL WOLF CHAOS

EXPECT TO PAY £79+ (JAPAN)

DEVELOPER: FROMSOFTWARE
RELEASE: 2004

■ A combination of YouTube attention, growing interest in FromSoftware and its Japanese exclusivity has ensured this wonderfully silly shooter has maintained a high entry fee. Famed for its over-the-top violence, exaggerated American patriotism and polished visuals, it keeps the thrills coming thanks to your ability to create over 100 weapons that range from simple handguns to monstrous rocket launchers. Interestingly, the price has dropped in recent months and it's now possible to pick it up from £79, although it can typically reach £100+ if the condition is particularly good. It's very English-friendly too, so you can buy in confidence.

» [Xbox] A lack of save points can make *Metal Wolf Chaos* quite challenging.

» [Xbox] A full English language voiceover means you should consider importing.

MODERN MECHS
Can't import? There are other ways to enjoy this slice of silliness.

The cult popularity of *Metal Wolf Chaos* meant a HD remaster was released in 2019 for PS4, Xbox One and PC. It's rather basic as remasters go (we actually still prefer the look of the original) but it has made this cult classic more accessible, which is always a good thing in our books, and it's available digitally for £19.99. A physical PS4 edition was released by Strictly Limited Games and ranges from £12 to £50.

DOUBLE TROUBLE

DEAD OR ALIVE ULTIMATE

EXPECT TO PAY £20+ (EUROPE)

EXPECT TO PAY £12+ (USA)

EXPECT TO PAY £7+ (JAPAN)

DEVELOPER: TEAM NINJA
RELEASE: 2004

■ *DOA Volleyball* aside, Team Ninja had a fantastic run on Microsoft's console, and it all kicked off with *Dead Or Alive 3*. *Ultimate* arrived nearly three years later and is effectively a compilation of the first two games in the series, and it's definitely a compilation of two halves. Interestingly, Team Ninja has included the Saturn version of *DOA* over the original arcade game, albeit with a few subtle enhancements and a higher resolution. The real work has gone into *Dead Or Alive 2*, which not only uses the graphical engine of *DOA3*, but also adds numerous gameplay mechanics, online play and includes Hitomi as a playable character. There are two variants you can buy for *Ultimate*; the first edition double pack comes in a cardboard case and typically sells for £20+, while a later revision in a single standard Xbox case starts at £4. The US and Japanese variants are slightly cheaper.

» [Xbox] Versus matches cater for team fights of up to four players.

YOU ORTA BUY IT

PANZER DRAGOON ORTA

EXPECT TO PAY £10+ (EUROPE)

EXPECT TO PAY £20+ (USA)

EXPECT TO PAY £30+ (JAPAN)

DEVELOPER: SMILEBIT
RELEASE: 2002

■ Sega released numerous exclusives for the Xbox, some of which were originally planned for release on its ill-fated Dreamcast. *Toejam & Earl III: Mission To Earth*, *Gunvalkyrie* and *Jet Set Radio Future* are all worthy exclusives you should consider seeking out, but we're plumping for *Orta* because it remains one of the most visually arresting games on Microsoft's first console.

» [Xbox] *Orta* has some truly beautiful lighting effects.

While some were disappointed that *Orta* didn't follow the RPG trail blazed by *Saga*, its challenging combat coupled with the ability to switch between three unique dragon forms still earned it plenty of fans. Despite less than stellar sales, *Orta* won't set you back much with PAL prices ranging from £10 to £30. The US version is pricier starting at £20, while the Japanese game sells for £30+. A tie-in white console was released in Japan, but it's so limited we can't even find it for sale!

MORE GAMES TO CONSIDER

AMPED: FREESTYLE SNOWBOARDING
DEVELOPER: INDIE BUILT
RELEASED: 2001
EXPECT TO PAY
UK **£1+,** US **£2+**

BLINX THE TIME SWEEPER
DEVELOPER: ARTOON
RELEASED: 2002
EXPECT TO PAY
£1+,US **£4+**,JPN, **£7+**

FORZA MOTORSPORT
DEVELOPER: TURN 10 STUDIOS
RELEASED: 2005
EXPECT TO PAY
£3+, US **£4+,**

GRABBED BY THE GHOULIES
DEVELOPER: RARE
RELEASED: 2003
EXPECT TO PAY
UK **£3+, £4+**, JPN **£10+**

KINGDOM UNDER FIRE: HEROES
DEVELOPER: BLUESIDE, PHANTAGRAM
RELEASED: 2005
EXPECT TO PAY
£1+, US **£5+**

FEEL THE FORCE

STAR WARS: KNIGHTS OF THE OLD REPUBLIC

DEVELOPER: BIOWARE
RELEASE: 2003

The Xbox is a little anaemic when it comes to RPGs but it does have some essentials and this is its high point. Unlike some of the games featured here, BioWare's epic RPG is readily available on other systems (even iOS) but it remained a console exclusive on release, so it easily makes our list. BioWare's decision to set the events of *KOTOR* 4,000 years before the events of the original trilogy is a sound one as it allowed for some tremendous creative freedom. Its strong story, entertaining characters and solid technical performance have all led to it being considered as one of the greatest *Star Wars* games of all time, and it still holds that magic today. Strong sales mean low prices and you can enjoy both PAL and NTSC editions of *KOTOR* for as little as £7.

» [Xbox] *KOTOR*'s combat is powered by the same D20 system seen in *D&D*'s *Third Edition*.

BLOODY BRILLIANT

NINJA GAIDEN BLACK

DEVELOPER: TEAM NINJA
RELEASE: 2005

One of the great things about collecting for the Xbox is that many of its best exclusives are still relatively cheap and rarely cross the £50 barrier. *Ninja Gaiden Black* is one such example, as you can pick up a copy of Team Ninja's enhanced hit from as low as £5.50. Granted, £20 is more typical, but that's still a good investment for one of the system's best action games, especially when you consider the arcade version is included as an unlockable extra. One thing to keep in mind is that *Ninja Gaiden Black* was part of the Classics range in the UK (much of its content was available as DLC for the original game) so its box art is completely different to the standard art that adorns most Xbox releases. The Japanese version is dearer, with prices starting at £26, while the US one is a little cheaper starting at £25.

» [Xbox] *Black* introduced a new 'Ninja Dog' difficulty for those that found the original too hard.

XBOX CONQUERS N64

CONKER: LIVE & RELOADED

DEVELOPER: RARE
RELEASE: 2005

Although other versions of *Conker's Bad Fur Day* do exist, Rare's remake is still worth seeking out. It's staggeringly superior to the N64 original in terms of visuals and it remains a mighty fine-looking game to this day, more so if you run it on an Xbox One. It's far easier on your wallet, too (the N64 version on *Rare Replay* is even cheaper). It's worth noting, though, that the Xbox Live side of the game, which was quite significant, is a lot harder to access, meaning you're not getting the full *Conker* experience that was available in 2005. Collectors don't seem to care, though and as a result Conker is slowly rising in price. PAL copies range from £11 to £33, while US copies range from £17 to £40. The Japanese version is the most expensive of the lot, with prices starting at £49.

» [Xbox] The Great Mighty Poo song is nowhere near as funny with its added bleeps.

» [Xbox] Look how lovely the fur rendering in *Live & Reloaded* is. Look at it!

WHICH CONQUERS?

Should you buy Rare's Xbox remake or seek out the N64 original?

N64

The most notable aspect of this version is there is a lot more profanity, which will please those who like their squirrels sweary. Its late release, however, means it now fetches silly prices, meaning you'll be hard-pressed to buy it complete for less than £100.

Xbox

Lost content aside, Xbox *Conker* is still our preferred option as it's a darn sight cheaper than its N64 counterpart and looks marvellous, even today. Microsoft did heavily censor the swearing, though, so it's certainly worth keeping that in mind.

KUNG FU CHAOS

DEVELOPER: JUST ADD MONSTERS
RELEASED: 2003
EXPECT TO PAY
£3+, US **£10+**, JPN **£14+**

OTOGI: MYTH OF DEMONS

DEVELOPER: FROMSOFTWARE
RELEASED: 2002
EXPECT TO PAY
UK **£24+**, US **£11+**, JPN **£15+**

QUANTUM REDSHIFT

DEVELOPER: CURLY MONSTERS
RELEASED: 2002
EXPECT TO PAY
UK **£1+**, US **£2+**, JPN **£9+**

LINKS 2004

DEVELOPER: INDIE BUILT
RELEASED: 2003
EXPECT TO PAY
UK **£0.50+**, US **£0.03+,**

FUZION FRENZY

DEVELOPER: BLITZ GAMES
RELEASED: 2001
EXPECT TO PAY
£0.99+, US **£11+**

TRICKY TOWERS

It looks like a multiplayer spin on Tetris, but there's a lot more to Tricky Towers than first meets the eye, as Joram Rafalowicz reveals

Words by Darran Jones

IN THE KNOW

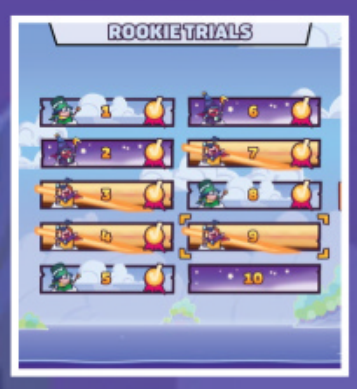
» **PUBLISHER:** WEIRDBEARD GAMES/ SUPER RARE GAMES (SWITCH)

» **DEVELOPER:** WEIRDBEARD GAMES

» **RELEASE:** 2016

» **PLATFORM:** PC, PS4, XBOX ONE, SWITCH

» **GENRE:** PUZZLE, MULTIPLAYER



» [PC] There are 50 trials in *Tricky Towers* to beat, and some are extremely challenging.

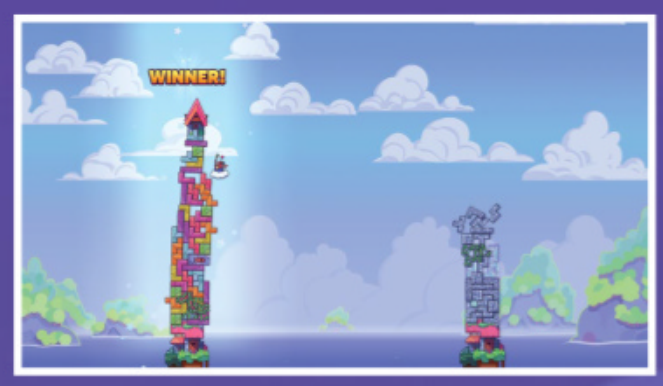
If it wasn't for Super Rare Games sending us a Switch review copy of *Tricky Towers* we'd have never been aware of this charming competitive puzzler. We only needed a few plays to realise how much fun it is, and it came as something as a surprise to learn that *Tricky Towers* made its debut in 2016. It was an even bigger surprise that its origins go back further and, despite its *Tetris* sheen, has ties to an old Wii game.

"It all started in 2007 with a minigame called 'Block Star' in *WarioWare: Smooth Moves!*," reveals Joram Rafalowicz, the creative director and cofounder of WeirdBeard Games. "You had to stack a couple of blocks on a platform and keep it balanced by holding the Wiimote on the palm of your hand. We really liked that minigame, but it was quite short, so we wondered what would happen if you could just keep on stacking, building a tower." That pondering led to the team creating a flash game called *99 Bricks* the following year, which was then updated for mobile in 2014 as *99 Bricks Wizard Academy*.

Of course, the most obvious thing you'll think of is *Tetris*, as *Tricky Towers* features similar looking visuals and has you rotating shapes as they drop downwards so that you can fit them as neatly as possible at the base of your tower. "That's a comparison a lot of people make!" exclaims Joram when we mention the similarity to him. "Actually, tetrominoes are all the shapes you can make with four blocks and they are just a great fit for building. We did experiment with different shapes, but they never worked as well as the tetrominoes."

Despite the familiar look and mechanical similarities to *Tetris*, *Tricky Towers* is very much its own game and revolves around competing wizards trying to best their opponent via three distinct modes: Race, Survival and Puzzle, although there's also single-player trials for those that like to go it alone. According to Joram, all three were challenging to implement, but one evolved more than the others. "It was actually the first mode we started developing, Survival," he admits. "The rules were based on our previous game *99 Bricks Wizard Academy*: drop three bricks and it's game over. So in multiplayer it became a mode where you could play until you dropped three bricks and the player with the highest tower won, but this felt really strange. You could be out first, but still win

JORAM RAFALOWICZ
Cofounder of WeirdBeard Games, based in Amsterdam



» [PC] Joram revealed that six core people worked on the game (outside of marketing and sound) and it took two years to complete.

MIGHT & MAGIC
GREAT SPELLS TO FLING IN TRICKY TOWERS

IVY
This useful light spell binds with nearby bricks it touches, adding handy stability to your tower.

LARGE
This slice of dark magic greatly enlarges tetrominoes, meaning they have a good chance of toppling an opponent's tower.

» [PC] Joram reveals that the multiplayer "took quite a bit of prototyping to reach the sweet spot between being engaging, but not requiring laser focus".

with the highest tower." Solving Survival proved quite, ahem, *tricky* and the team added a second win condition, which Joram feels "added some extra pressure to advanced players to build quickly and it balanced out quite nicely".

While *Tricky Towers*' mechanics will certainly win you over, it's the charming retro-style visuals that you'll likely notice first. Many indie developers are either making their games pixel-based or copying older styles and WeirdBeard is no different. "It was a natural fit to go with a cute retro style," admits Joram, "it evokes pleasant childhood memories for a lot of people, and is also very fitting for the atmosphere and general feel we wanted for the game." Still, for all its great looks and solid mechanics, it's the competitive play that's the main focus of *Tricky Towers* and as you might have expected, it came with a number of challenges for the team, with the online side being a particularly tough nut to crack. "We knew from the beginning we wanted to include online multiplayer, so we tried to incorporate it into our technical design, but as production continued, the online part introduced more and more complicated edge cases," admits Joram. "And this was not about in-game – the online game code is quite straightforward – all the complexity was in the game flow. Things like determining the winner at the end, but when just before the match ended a player disconnects. To set up a system that can handle all these edge cases was the biggest technical hurdle for us."

Those difficulties continued as focusing on multiplayer gaming is very different to catering for solo games. "As a designer you have less control of the player experience, because other players can do strange things," confirms Joram. "In *Tricky Towers* we have quite good control of this, because players only interact with each other via spells – but even so, you need to think about what happens in a four-player game if every player shoots off a spell at the same time. Chaos. Chaos is what happens," he laughs.

The most recent version of *Tricky Towers* is on Nintendo's Switch and it's largely the same experience as it is on other platforms. "The main changes for the Switch version were making sure the interface and UI were all updated to be as smooth and comfortable as possible for Switch players," explains Joram. "The game itself is a natural perfect fit for the Switch!" Which leads us back to that original copy from Super Rare Games. How did that particular collaboration come about? "They reached out to us after we released *Tricky Towers* on Nintendo Switch," concludes Joram. "After some discussion, it was decided that a collector's edition of *Tricky Towers* would be a great thing to create! We knew there were fans of the game who had been asking us for *Tricky Towers* on Switch, and we were sure that they would love the chance to own a limited edition physical copy of the game!" Even if you can't get your hands on said copy, you certainly won't be disappointed with a digital version.

TRICKY CHALLENGES

THE MODES EXPLAINED

SURVIVAL

The Battle and Trial modes for this are largely similar. You'll be given a set number of blocks and must stack all of them. Should blocks topple from your tower you'll lose a life, and once all three are spent it's game over. Whoever stacks the most blocks wins.

PUZZLE

This works exceptionally well in single-player and is also great fun with friends. You'll be given a line and a set number of tetrominoes and you need to stack them all under a laser. Hit the laser and the challenge ends. The player who stacks the most in the Battle mode takes the glory.

RACE

Racing is great fun and offers the most opportunities to mess your opponents up as you're basically trying to reach a certain height before they do. Spells are crucial here so go wild. The single-player option is equally enjoyable and tension is kept high by giving you a tight time limit to beat.

» [PC] *Tricky Towers* can trace its roots to a 2008 flash game called *99 Bricks*.

GRASS

This dark magic greatly hinders your opponent as it causes grass to sprout, which makes it hard to place bricks.

UNDO

All wizards deserve a do-over and this handy little spell will erase your last poorly placed brick. Lovely.

BALLOON

Opponent racing ahead? Slow them in their tracks by sending out a balloon that will hinder their next brick.

CLASSIC MOMENTS

Burning Rangers

» **PLATFORM:** SATURN » **RELEASED:** 1998 » **DEVELOPER:** SONIC TEAM

It's never hard to spot a show-off, and playing *Burning Rangers* it was easy to see that Sonic Team's programmers were flexing at other Saturn developers. The huge rooms, the free movement, the lighting effects – for a minute, the technical achievements almost allowed you to forget that your console's days were numbered. Of course, the one that really excited you was the real transparency effect, even if it didn't add much beyond a more pleasant cosmetic appearance. Or at least, it didn't seem to.

But Sonic Team was one of Sega's top studios for a reason, and upon reaching the second stage boss you were reminded of the studio's skill. Standing atop a platform floating in a big circular pool, you spotted a menacing fish with razor-sharp teeth swimming below the surface. It was a good job it was so visible, too, because keeping your distance was crucial, and it wasn't easy to stay on the platforms with all the bombs that blasted fish was launching your way. Transparency, it seemed, could enhance gameplay after all.

BIO

Following the release of *NiGHTS Into Dreams*, Yuji Naka and Sonic Team decided to develop their engine further for a new game based on rescuing people rather than fighting them. The result was *Burning Rangers* – a game about futuristic firefighters, who could reach even the most inaccessible parts of disaster-struck power plants and space stations with thruster-assisted jumps. As the game arrived in the Saturn's declining months, it was issued in small quantities, meaning few got to experience it. The game was never officially re-released, and now it commands a hefty price.

MORE CLASSIC BURNING RANGERS MOMENTS

Backdraft Backflip

Easily the coolest part of the standard repertoire of moves available to a Burning Ranger is the evasive backflip. When you see a glowing wall and whistling sounds, that's the telltale sound of an imminent explosion, but all you need to do it press down on the d-pad and you'll boost back through the air to safety.

Into The Dark

Any good emergency kit should feature a torch, and the first stage of *Burning Rangers* shows why – if the power goes out and the room goes dark, you'll be stuffed without one. Thankfully, our heroes get torches thanks to the light sourcing system – an example of technology being used in service of game design.

Carry-on Luggage

What stands between you and the only escape pod on the space station? Only a broken beam above a pit of fire. No problem for Tillis – except that she's got to carry a kid to that escape pod and can't extinguish fires. Brute force goes out of the window as skill and timing are brought to the forefront again.

Burning Ship

In the final stage, you've got to make it to the centre of the gigantic spacecraft to begin your assault and save Earth. That means a trip in the Burning Ship, a fast-paced tunnel ride in which you've got to grab diamonds and dodge obstacles. Be careful – as always, one hit kills you if you're caught without diamonds.

LET'S GET PHYSICAL

EXPANDING YOUR RETRO COLLECTION USED TO NECESSITATE HUNTING FOR USED GAMES, BUT OLD FAVOURITES ARE NOW BEING REISSUED FOR THEIR ORIGINAL SYSTEMS. WE TALK TO THE COMPANIES BEHIND THESE RELEASES TO FIND OUT HOW AND WHY THEY'RE HAPPENING

WORDS BY NICK THORPE

» As you can see from its *Mega Man* editions, iam8bit bundle plenty of extra material with its games.

There are plenty of ways to play classic games today, from mini consoles and the Evercade to digital re-releases on modern hardware, but some of us just prefer original hardware. There's nothing wrong with that, of course, but modern demand doesn't always play nicely with historical supply. Some games that are now recognised as classics were underappreciated in their own time, meaning that there aren't too many copies to go around. Others may have been regionally restricted, or wound up as the victim of publisher problems. Lest we forget, gaming is also more popular than it was 30 years ago. Constant demand from players enthralled by modern sequels is enough to push up the price of even the most common of classics. In the past, that has meant that players either had to pay through the nose or go without, but today there are a number of companies out there that have decided to return classic console games to market by manufacturing brand-new copies, compatible with the original hardware.

» External packaging often resembles that of the original systems, while carefully avoiding any potential trademark infringement.

But why manufacture new games for obsolete hardware in the first place? Surprisingly, we encountered a variety of different motivations. For one company, it was a simple case of supporting its other business ventures. "Retro-Bit started producing clone consoles and peripherals so publishing carts was something we always wanted to do," says marketing manager Richard Igros. "We believe there will always be a demand for physical media and even more so in gaming. With retro gaming having a more prominent space in the industry over the years and breaking more into the mainstream, this was only going to be a natural next step and companies are starting to realise that." Retro-Bit's reissues have included games such as the *Data East Classic Collection* and *Jaleco Brawler's Pack* multicarts, as well as *Metal Storm* for the NES.

Josh Fairhurst of Limited Run Games sees it as a simple case of satisfying market demand. "Reissuing

» Josh Fairhurst of Limited Run Games is a firm believer in physical media.

existing games has always appealed to me because there are a ton of younger people being introduced to these older platforms via YouTube and they want to collect for these systems. Supplies are fixed, so prices have been rising to a pretty absurd degree. The market's response to this has been to turn to bootlegs," he explains. "These bootlegs aren't earning the licence holders anything, but at the same time the licence holders aren't pressing these themselves. Someone needed to step in to fix this so new, legal copies can enter the market."

Limited Run Games has manufactured new runs of *The Secret Of Monkey Island* for Mega-CD and a variety of *Star Wars* games including *Shadows Of The Empire*, as well as original NES projects like *Jay & Silent Bob Mall Brawl*.

Over at iam8bit, the driving force behind the decision to enter the market was a desire to celebrate games. "We've always been fascinated by the homebrew scene – going to classic gaming expos and seeing new riffs on the defunct consoles," say co-owners Jon M Gibson and Amanda White. "Way back in 2006 we even officially commissioned, with Capcom's permission, a playable Atari 2600 version of *Mega Man* for an art exhibition installation, to play along with a 15-times-scale Atari controller. Our cartridge obsession has always been there, so we started thinking – what if we created a 'Criterion' style label for old-school games?" The result is the company's *Legacy Cartridge Collection*, which so far includes games such as *Mega Man 2* for the NES, *Street Fighter II* for the SNES and *Aladdin* for the Mega Drive.

If you had the misconception that reissuing a game is a simple task, the amount of time it takes should hopefully disabuse you of that notion. "From securing a licence to going to market can be anywhere from nine months to a year," says Richard. "This entails everything from preliminary discussions to agreements with IP holders, brainstorming ideas for packaging and collectibles, testing, approvals and production." For Jon and Amanda, the process is even longer. "It can take many years. We have projects in the pipeline that we began a few years ago that won't be publicly revealed until 2021 or 2022, or beyond that. It's a long process, because for us, it's about doing it correctly versus rushing it out the door."

The first task is to select titles for publishing, and each company has a different decision-making process on this front. "We are looking for titles that were either not available in specific regions or titles that have gone up in price," says Richard, explaining Retro-Bit's approach. "We want to make them available at a reasonable price to have fans experience them." But for iam8bit, market prices and availability are secondary concerns. "The *Legacy Cartridge Collection* is our iam8bit ode to the absolute best of the best – cartridge-based games that were landmarks of their time," Jon and Amanda tell us. "Sure, you'll see some high-value resale releases from us in the future, but if we're to look at the *Legacy Cartridge Collection* [edition] of *Street Fighter II*, that's a game that you can find in the bargain bin for a couple bucks. Still, it's one of the most integral, pinnacle games ever released, and you can't argue with that kind of rank."

Over at Limited Run Games, the approach is less simply explained. "For me it is a variety of things – notoriety, IP, availability. For example, the original versions of our *Star Wars* releases aren't exactly expensive or hard to find, but at the end of the day, I'm a huge *Star Wars* fan. It's a franchise that defined my childhood. Having the opportunity to have any association with something this important to me, it's not something I was going to pass up," says Josh. However, the company does have the goal of increasing availability of games that are difficult to find. "For some of the other stuff we're looking into for future releases, yeah, rarity and availability is a huge part of why we want to re-release those. They're games that are being frequently bootlegged and we want to try and put a stop to that to earn the games' developers and creators the money they deserve." Josh is also candid about the fact that he can't get every game he pursues. "I tried to convince Sega to let me release *Pulseman*, an amazing game from Game Freak that only saw release on Sega Channel, but unfortunately that was unsuccessful!"

QUALITY CONTROL

HOW TO MAKE SURE YOUR SHINY NEW CARTRIDGE DOESN'T KILL YOUR TREASURED CONSOLE

One thing you may have heard about newly manufactured cartridges is that they're not up to the quality standards you'd expect. Sadly, there's some truth to that. Some very desirable re-releases have been officially licensed, but exhibited poor physical design – and in some cases, refused to even work on official hardware. "There is a very, very, hardcore and passionate community around reproduction game boards and if someone uses a shoddy board in a commercial product – you're going to hear about it, even if you aren't directly involved in that community," says Josh. "If we didn't care about quality, we could certainly go over to AliExpress and bulk buy the worst possible boards for $8 a piece or less, but we have to consider the quality of our products first and foremost."

For a company determined to keep its own nose clean, this can lead to overcompensation, as iam8bit found out. "One important bit of context – when we were planning the first *Legacy Cartridge Collection* release, the industry had never seen something like it before. As a result, a lot of speculative conversation swirled between lawyers and our licensing partners," Jon and Amanda explain. This led to the company's *Street Fighter II* cartridge coming with an eyebrow-raising warning that your SNES may catch fire. "Long story short – the warning was not about the cartridge at all, but actually pertaining to the use of retro consoles," they explain. "The concern was, if you had a dusty old SNES in your attic, with cables being chewed on by rats and moths making a nest of the cartridge slot, then you best be careful. Think about it – most people don't take care of their old technology, so it makes sense."

Modern cartridge reproductions both bootleg and official, as well as flash cartridges, have been affected by problems over the years. So what should you be looking out for to ensure quality? Some things are more obvious than others. Giveaways for low-quality boards are silver-coloured connector pins produced via a technique known as hot air surface levelling – these won't withstand repeat insertion and removal. Similarly, if a cartridge connector edge is flat, showing no signs of bevelled edges or corner chamfers, that's no good. What's harder to see without electronics expertise is when PCBs don't properly translate the voltage required by older consoles for modern chips. To learn more about this, RetroRGB has a great guide that you can find at bit.ly/CartQuality.

TOP OF THE CARTS

A SMALL SELECTION OF OUR FAVOURITE RE-RELEASES TO DATE

SUPER R-TYPE & R-TYPE III

RETRO-BIT

While *Super R-Type* is great, the chance to pick up the rather lovely *R-Type III* at an affordable price is the main draw of this compilation cartridge. It also includes some lovely extras such as enamel pins, stickers and art cards by regular *Mean Machines Sega* correspondent Paul 'OtaKing' Johnson.

EARTHWORM JIM 1 & 2

IAM8BIT

This cartridge wasn't cheap at $134.99, but *Earthworm Jim* and its sequel were defining platform games of the 16-bit era and it's hard to argue with that sort of quality. 100 cartridges from the production run of 2,000 were cow print instead of udder pink, and plenty of extras were included.

STAR WARS: EPISODE I RACER

LIMITED RUN GAMES

While it's not the hardest game to track down used copies of, this futuristic racer is still highly regarded. The regular edition came on card like a *Star Wars* toy of old, while the limited collector's edition included instructions, art cards, a poster, an enamel pin and a commemorative coin.

METAL STORM

RETRO-BIT

This is arguably the most lavish of Retro-Bit's releases, including a figurine, a poster and more. But what's really interesting about it is that instead of re-releasing the standard North American version from 1991, the revised and updated Japanese version from 1992 has been translated into English.

THE SECRET OF MONKEY ISLAND

LIMITED RUN GAMES

There aren't many publishers out there doing Mega-CD releases, but this one is the pick of the bunch so far because the game is great. The standard version comes in the regular US-style long box, while the premium edition comes with a variety of cool extras including a poster and badges.

» The external sleeve for *Metal Storm* features some neat artwork – it's clearly made for display rather than retail.

Once the rights are acquired, sourcing the actual programs to put on the cartridges is the next challenge, which each company approaches differently. "Usually, the IP owners provide us with the core ROMs, and in some cases where available, the original source codes," says Richard. "If multiples are presented, we usually go with the full, unedited version of the title – case in point, *Metal Storm*'s Japanese version." In examples such as *Metal Storm*, where new translations were produced, an extra layer of approval is required. "We do get all grants and buy-ins from the original IP holders before we do any releases. They are aware of even the slightest changes with the titles and even give suggestions and support in regard to these steps."

iam8bit is less explicit on how ROM images are sourced, suggesting that more than one approach is used. "It's a case-by-case basis, because sourcing ROMs is not easy," Jon and Amanda say. "Much like anything – film, animation, books – companies didn't have a ton of foresight into archiving, especially early digital stuff. And it gets extra complicated when there are multiple revisions of a ROM floating around," they tell us. "It's rather forensic, and speaks to the value of having incredibly nerdy and brilliant folks on the team that are not only up for the challenge, but thrive on it. Sometimes it can take months, even years, to dig things up."

Limited Run Games takes a slightly different approach. "We buy brand-new, unopened copies of the games we are releasing and (painfully) open them up and dump the ROMs ourselves," explains Josh. "This ensures that our ROM files are clean and that we're only profiting from our own work. I remember seeing a GDC talk from Frank Cifaldi where he revealed that Nintendo was using common ROMs downloaded from the internet for their Virtual Console releases. I don't want an embarrassing moment like that for us." But even when the code is sourced directly from original retail cartridges, the product you receive is not a simple duplication. "With the *Star Wars* games, we had to actually edit the ROMs to remove companies that no longer had associations with the games. This added a few weeks on to the process."

» The LucasArts premium editions published by Limited Run Games have a consistent packaging style.

» Retro-Bit's early cartridges were quite distinctive, looking decidedly unlike both the US and non-US originals.

One aspect that has changed from the past is platform holder approval. Put simply, Sega and Nintendo don't appear to have any interest in officially licensing new cartridge releases for their legacy hardware, though that doesn't mean they're ignorant of the scene. "We work with Nintendo regularly and they are aware of the *Legacy Cartridge Collection*. We have really lovely relationships with all of our partners, including Nintendo, as we also publish modern games as physical Switch releases and do a variety of collaborations," Jon and Amanda explain. "The game industry is an ecosystem that benefits from transparency, because we're all just trying to bring joy to people. There's no benefit to being sneaky." Richard confirms that Retro-Bit's experience is similar. "We have had discussions with platform companies, and they are aware of what we are doing. Every release we do, we always stay compliant within our bounds to adhere to specific trademarks and rights. Sega is a big partner of ours and they are aware of our upcoming cartridge releases. They are a big fan of these releases as well and have no qualms with these retro releases as long as we have the rights from the original IP owners."

In the past, Nintendo and Sega manufactured the majority of cartridges for their consoles, but with those facilities long gone, companies must source their own parts. "The *Legacy Cartridge Collection* team is family at this point, and we relish any opportunity to shower them with compliments," Jon

THE WISHLIST

WHILE WE'RE SURE THE MANUFACTURERS OF REISSUES HAVE THEIR OWN PLANS, WE THOUGHT WE'D SUGGEST SOME GAMES THAT COULD DO WITH A REPRINT

NINJA COP

GAME BOY ADVANCE

As well as increasing the supply of a rare game, a *Ninja Cop* reissue could add the option to delete your save data.

RESIDENT EVIL GAIDEN

GAME BOY COLOR

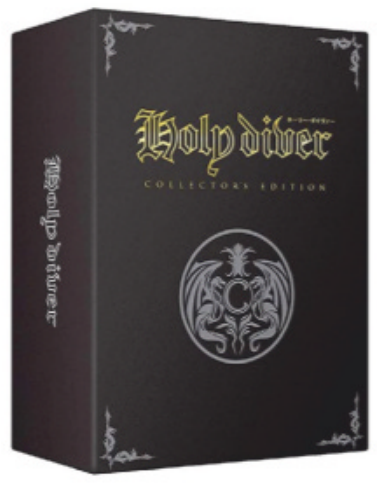
This one's quite expensive to acquire today and could be an easy win, as Capcom is already on board with reissue projects.

and Amanda tell us. "The fine folks at Infinite NES Lives engineer and fabricate the PCBs, and the team at Retrotainment tirelessly orchestrate production of the carts, down to the most insane nerdy nuances. Our in-house team at iam8bit manages all creative, restoration, print production, fulfilment, shipping, sales and business. And as much as possible, given that we're often working on games that are 30 to 40 years old, we track down original team members to assist. No exaggeration, it's the best bunch of humans we could ever have joined forces with."

Retro-Bit originally manufactured custom cartridge housing, but since moved to more familiar designs. "The cartridge housing can be inspired by the original carts for NES, SNES, Genesis etc. We ensured though that the quality of plastic materials in the housing is sturdier and has longevity, it's the small quality-of-life details we strive to achieve in both presentation and performance," Richard explains. Retro-Bit also manufactures its own PCBs, and supplies the ones used by Limited Run Games. "Retro-Bit has the best balance of quality and cost, because there are more expensive options out there," highlights Josh.

Keeping prices low is a real concern as some players have criticised the pricing of these new releases, but it's worth remembering that cartridges were never cheap and still aren't. "It's ironic, because brand-new SNES games could cost upwards of $70 to $80 at retail in the Nineties, so if you consider inflation, the *Legacy Cartridge Collection* is below the market standard from 30 years ago," say Jon and Amanda. Josh from Limited Run Games agrees, "People think we're Scrooge McDuck-ing into piles of money from our retro stuff due to the price tags we put on them, but the reality is that, no, we're really not making much. An assembled NES game with a proper voltage board costs us nearly $20 just for the cartridge, an N64 game can cost $22 per cartridge!"

» Cartridge variants are common with retro game reissues – 5% of *Earthworm Jim 1 & 2* cartridges had the cow print shell.



» Retro-Bit's collector's editions are visually distinct from one another, themed around each game.

Some collectors may baulk at the idea of new games driving down the value of their originals, but all three companies we spoke to have ensured that their games are easy to tell apart from older copies. Identical copies are not possible to create while respecting the law, as all of them refrain from using trademarks that they're not entitled to use – that's why you don't see any Sega or Nintendo logos on the boxes. But beyond that, they all desire to provide bespoke experiences, tailored to the collector's market. Of the companies we spoke to, iam8bit has the highest priced releases – all of them have cost $99.99 or more, with the *Earthworm Jim 1 & 2* cartridge coming in at $134.99. That level of pricing has drawn some criticism, but the company feels that the product justifies it. "We're packaging and production snobs, and for us, the details are to die for," Jon and Amanda affirm. "When you open a *Legacy Cartridge Collection* release, we want you to drown in the attention to detail – for it to be a tactile, sensory experience. All that definitely comes at a price – which is why iam8bit releases are the most expensive on the market – but that's also what makes them so special. We don't cut corners, ever."

Retro-Bit's initial releases were multi-game cartridges featuring up to five games, but the company has since pivoted its focus. "We made some changes not only to the aesthetics of the cartridge but also the quality of contents in the types of buttons and stickers from those early cartridges to our *Collector's Editions*," says Richard. "The team we have now is focused on adding additional emphasis to providing a quality experience for the fans to enjoy." Limited Run Games offers a choice of standard or premium editions, but even the standard editions can look very different to the original releases. "We didn't want to just re-release common games as they were – we wanted to approach them in a way that suited the particular IP," says Josh. When I think about *Star Wars*, what makes me most nostalgic is the action figures, and I think that is true for a lot of people, so to me it just made sense to package these on cards like the figures."

One thing's for certain – the appetite for these reissues is out there, with many of them already sold out, and you should expect to see more of these releases in the future. Limited Run Games will shortly be reissuing the cult favourite *Shantae* for Game Boy Color, while iam8bit has hinted at future plans that it is keeping under wraps. Retro-Bit has announced plans for Mega Drive reissues of *Mega Man: The Wily Wars* and *Toaplan* shooters including *Hellfire* and *Zero Wing*, plus Irem's *Hammerin' Harry* for the NES and *Undercover Cops* for the SNES. All three companies have confirmed that they have plans to expand the number of systems they cover, too. Meanwhile, there are other companies in the field – Piko Interactive has been active for a number of years, and in Japan Columbus Circle has made a name for itself by issuing new cartridges. It's easy to see why some people aren't happy about this trend, as new supply could potentially devalue games they spent a large amount of money on. But if you want a sound investment, buy property – games are for playing, and we welcome anything that gives people a way to play them in the manner they prefer.

SPACE STATION SILICON VALLEY

N64

The original release is impossible to beat 100% without cheating, so we'd love to see a new bug-fixed version produced.

GRIND STORMER

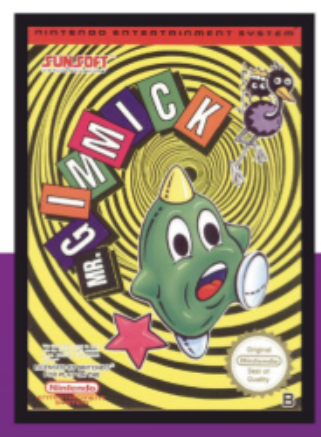
MEGA DRIVE

Many cartridges from the original production run are failing due to faulty PCBs – something a fresh run could effectively remedy.

TRIALS OF MANA

SNES

Having officially translated this for *Collection Of Mana*, it would be lovely if Square Enix could allow us to enjoy it on a SNES.



MR GIMMICK

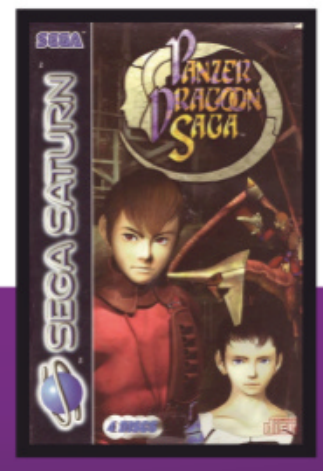
NES

With an expensive PAL version and no prior release in North America, this NES platformer is a prime candidate for reissue.

POPFUL MAIL

MEGA-CD

The price of this platform RPG would justify a re-release, but a big reprogramming workload could scupper a PAL version.



PANZER DRAGOON SAGA

SATURN

It's a long shot as no company has dived into CD-ROM releases for copy-protected consoles yet, but we want it so badly.

Metroid Fusion

"YOU STILL DON'T UNDERSTAND WHAT YOU'RE DEALING WITH, DO YOU?"

» GBA » 2002 » NINTENDO R&D 1

I know it seems obvious to many of you out there, but *Metroid* games are kind of scary. It makes a lot of sense, given that the developers of the original game were deeply inspired by Ridley Scott's 1979 sci-fi slasher film *Alien*. The games conjure up this unmistakable feeling of dread and isolation – that intro to *Super Metroid* aboard the stricken space colony, where you arrive to be greeted by dead bodies, must have frightened the pants off of gamers back in 1993.

I didn't think *Metroid* was scary. My introduction to the series was *Metroid Prime* while I was at middle school circa 2004. It nails that feeling of being alone on a hostile world, but mostly it plays out like a power fantasy where you're this intrepid explorer, blasting the glowy bits off all kinds of alien flora and fauna. Still, I loved it.

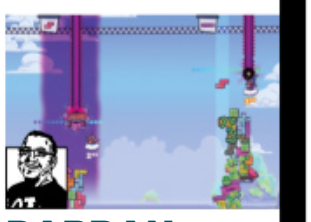
I enjoyed it so much, in fact, that I promptly badgered my mate Josh to borrow his GBA copy of *Metroid Fusion*, thinking it'll be more of the same, but in 2D and with pixel art. "Sure," he said, "watch out for this thing called the SA-X, though, that scared the crap out of me. Oh, and don't forget to link it up with your GameCube because you unlock the *Fusion* suits for *Metroid Prime*." In retrospect, Josh was a great friend who gave good advice but I scoffed at his warning. 'How spooky could this SA-X be?' I thought to myself. 'It's all sprites and pixels. That's not scary. It's hardly *Resident Evil*, is it?'

Turns out, sprites *can* be scary. Like all *Metroid* games, Samus loses her gear at the start of *Fusion*, but here they all get absorbed by a parasite which then becomes a haunting imitation of her – the SA-X. Compounding things further, you're trapped aboard a derelict space station, hunted by this super-powerful alien with no real method of fighting it. You have to run.

Powerful nemeses I can handle, but what solidifies the SA-X as something harrowing is an early close encounter. You descend an elevator like normal, but the camera lingers in the empty room. A wall explodes and a suit of power armour thuds through the debris. It pauses, and then turns its gaze to you through the screen. Then the camera zooms in and you see its face with those cold, dead eyes… ugh, even today it still manages to make my stomach turn in terror.

>> We're covering all kinds of media this month. We look at the latest games, but also check out the new tome from Bitmap Books and bathe our ears in remixed Amiga tunes

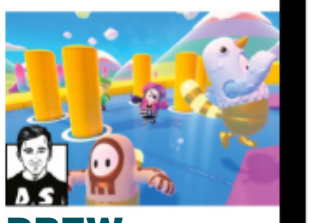
PICKS OF THE MONTH



DARRAN

Tricky Towers

I've been having a tremendous amount of fun with the Switch version and my daughter likes it as well.



DREW

Fall Guys: Ultimate Knockout

This light-hearted battle royale is a lot like *Takeshi's Castle*. Let's all tweet Craig Charles to get him to narrate livestreams of the game!

»[Switch] The back dash works in mid-air, which is useful when fighting the Horseman.

Panzer Paladin

THE SUBTLE ART OF HITTING BADDIES

INFORMATION

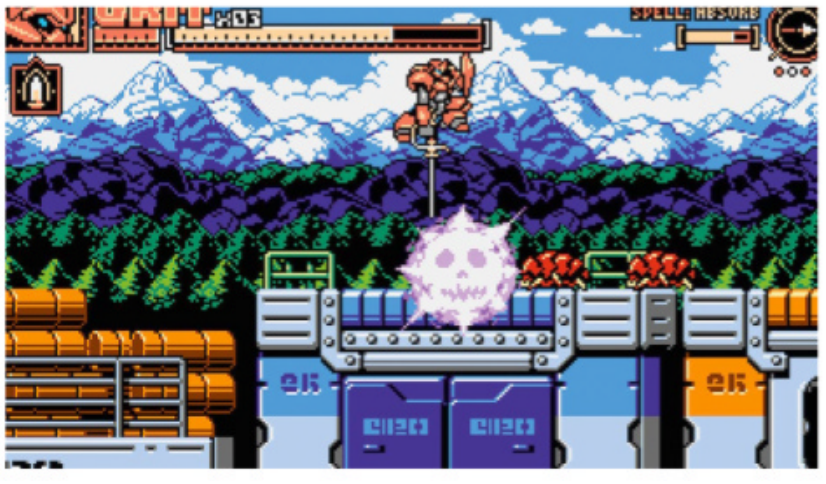
- **FORMAT REVIEWED** SWITCH
- **ALSO ON:** PC
- **RELEASED:** OUT NOW
- **PRICE:** £16.00
- **PUBLISHER:** TRIBUTE GAMES
- **DEVELOPER:** IN-HOUSE
- **PLAYERS:** 1

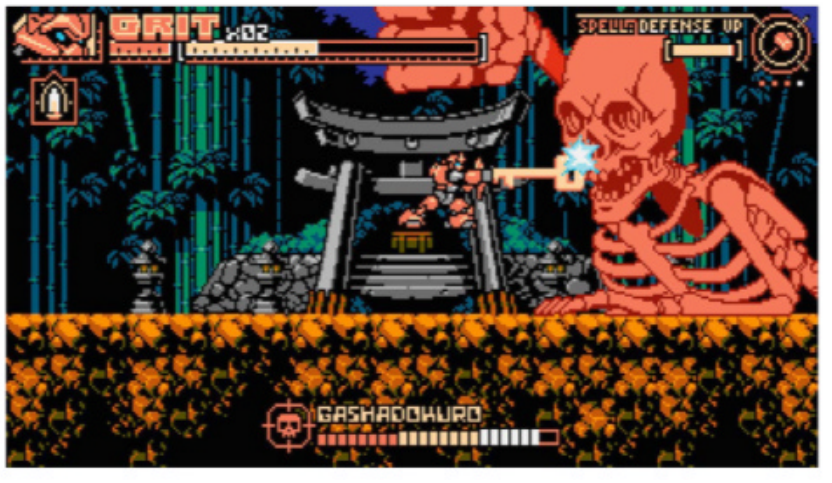
Mythical creatures are attacking Earth, and only the Panzer Paladin can save us! Piloted by the rescue android Flame, it must slay the likes of Anubis and Medusa, keepers of mystical weapons that have some connection to the ongoing supernatural invasion. All you have to do is pick a country that's currently undergoing attack, which you can do freely as in the *Mega Man* games, and launch yourself into battle.

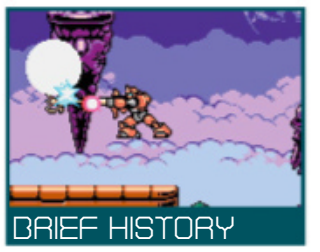
For the majority of the game, you'll be in charge of Grit, the hulking Panzer Paladin robot. He's capable of swinging his weapon from both standing and crouching positions, and can block certain projectiles with his shield when not moving or attacking. Some enemies can do this too, making for exciting mini duels. He can also attack upwards – doing so mid-jump essentially provides a double jump – and can strike foes downwards in mid-air, allowing you to bounce between enemies. It's also possible to perform a back-dash to quickly escape trouble and keep your shield facing the right direction. Controlling Grit feels great and there are plenty of satisfying combat opportunities within this game.

However, what makes *Panzer Paladin* really interesting is its use of weapons. Throughout the course of your adventure, you'll pick up a variety of new weapons from downed foes and in the environment. These are all broadly categorised as cutting, piercing or impact weapons, which matters when you're facing off against enemies with weapons of different types. While some weapons are more durable than others, all will break with enough use – but before they do, you have a few ways to sacrifice them effectively. When you reach a checkpoint, you must

»[Switch] Combat feels wholly natural – you never feel particularly constrained or lacking in options.

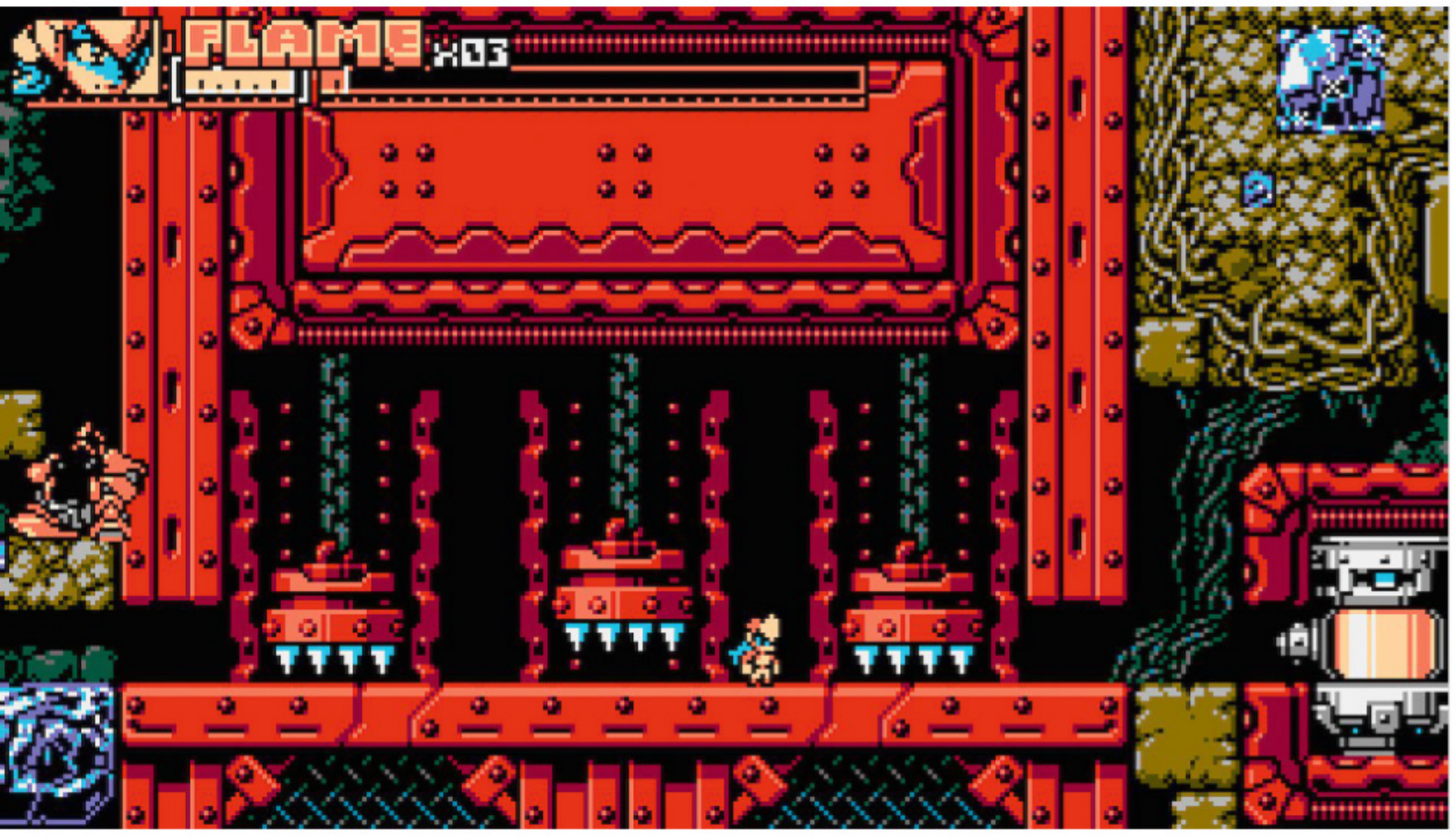






» Tribute Games is a Canadian development team formed by ex-Ubisoft staff Jonathan Lavigne, Jean-Francois Major and Justin Cyr, whose past projects include games such as *Scott Pilgrim Vs The World*. Since forming Tribute Games they've created a number of retro-themed games including the likes of *Ninja Senki DX*, *Wizorb*, *Mercenary Kings* and *Flinthook*. *Panzer Paladin* is the latest, inspired by aspects of NES games such as the combat system of *Zelda II: The Adventure Of Link*, with other recognisable influences including *Mega Man*, *Blaster Master* and *Castlevania*. The game is currently available on Switch and PC, but other platforms may follow.

»[Switch] Bosses can be impressively big and well-animated, but fight design can be undermined with mechanical abuse.



»[Switch] Ideally, you want to spend as little time as possible as Flame – and never during boss battles.

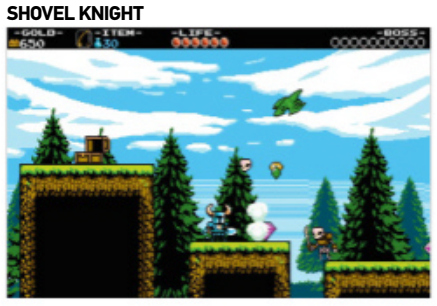
WHY NOT TRY

▼ SOMETHING OLD

NINJA GAIDEN

▼ SOMETHING NEW

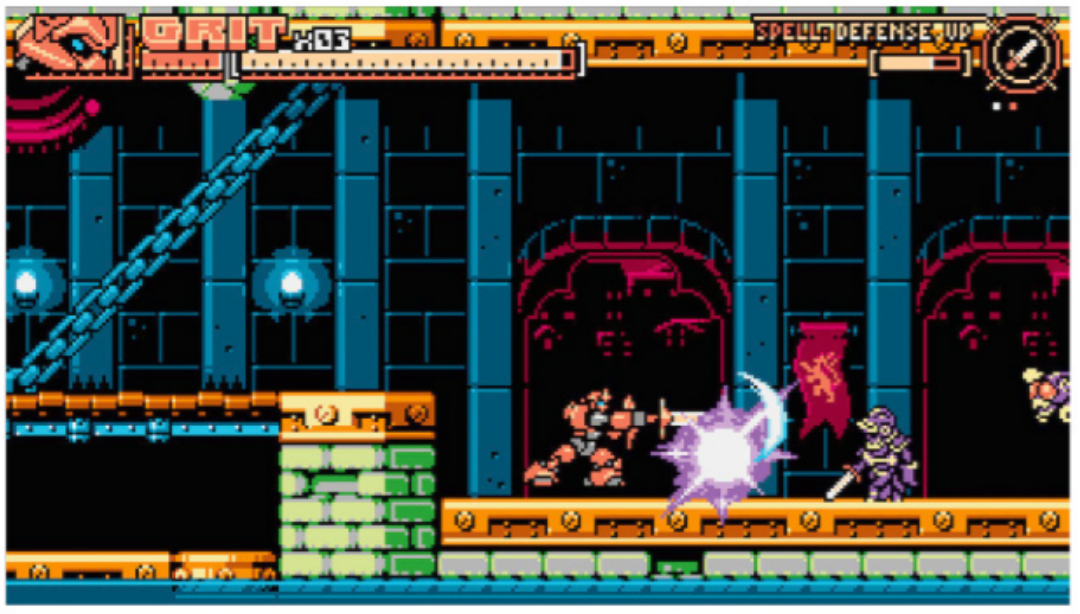
SHOVEL KNIGHT



»[Switch] Surprisingly, large enemies like this are often less trouble than the smaller ones.

»[Switch] Falling platforms and exploding floors are just some of the environmental obstacles you'll face.

»[Switch] There's certainly a lot of colour to be seen in *Panzer Paladin* – it's a perfect antidote to bland, muted worlds.



insert a weapon in order to activate it. Alternatively, throwing your weapon gives you additional range and damage, or intentionally breaking it casts a magic spell that grants beneficial effects such as boosts to attack and defence, healing, or increased weapon durability.

Your weapons take on additional importance beyond combat functions, too. You can only have four equipped at any time, with the excess making their way into your inventory. Between each stage you'll have the opportunity to trade them away for health boosts, and you're greatly advised to do this in the early going because if you begin to carry too many, your 'spirit burden' increases. This leads to a state of heightened danger, expressed as additional boss battles – these are risky, but they do offer unique, powerful weapons so as your confidence grows you may choose to trigger them.

There are times when you'll leave Grit behind and control Flame directly – sometimes out of necessity, as she's smaller and thus able to reach otherwise inaccessible spaces, but at other times voluntarily to access health refills and bonuses. Flame can't pick up weapons and has considerably less health than Grit, but has access to a *Castlevania*-style whip that doubles as a way of swinging across gaps. These sections tend to be less fun, as the satisfaction of the combat system is lost and Flame is just a bit too fragile for her own good, but thankfully they represent a minority of the action.

While the game is broadly well-designed, we did spot the odd flaw. These most commonly involved enemies being placed in awkward platforming spots – one hit in mid-air will halt your momentum, usually resulting in a plummet down a pit. This wouldn't be so bad, but the stages have too few checkpoints for their length. However, the bigger problem is the boss fight design. They're visually impressive and a lot of work has clearly gone into their attack patterns, but so long as you keep hold of your weapons during a stage, it's all too possible to just brute-force your way through encounters by simply casting plenty of spells. But if you fail to beat one at the first attempt, you won't regain your weapons upon death, so you'd better hope for a full inventory.

Still, *Panzer Paladin* is quite satisfying at most times, and it's well-presented too. The game uses an '8-bit plus' aesthetic, with pixel art reminiscent of the NES and visual effects that would be far beyond it. The detail of the anime-inspired story scenes would have been astonishing back in the late Eighties, while the artists have embraced the garishness of the NES look to great effect. The music takes a similar approach, based around chiptunes with the odd additional flourish, and is enjoyable in the moment but doesn't stick with you post-game. There's also plenty to do for those that do fall in love with the game, with modes including a tougher Remix mode and the option to create your own weapons.

Panzer Paladin is an accomplished action game with some neat ideas, varied stages and some very satisfying combat, which unfortunately has a couple of flaws that prevent it from hitting the heights of retro-inspired classics like *Shovel Knight*. It's still a solid option though, so if you like your platformers with plenty of slicing and dicing, it comes recommended – particularly if you're especially patient or skilled.

In a nutshell

Although it isn't quite as refined as we might have hoped, *Panzer Paladin* is an enjoyable throwback platform hack-and-slasher. The combat is simple, responsive and fun – just how we like it.

>> Score **80%**

PICK OF THE MONTH

Moose Life

» System: PC **» Buy it from:** Online (Steam) **» Buy it for:** £5.19

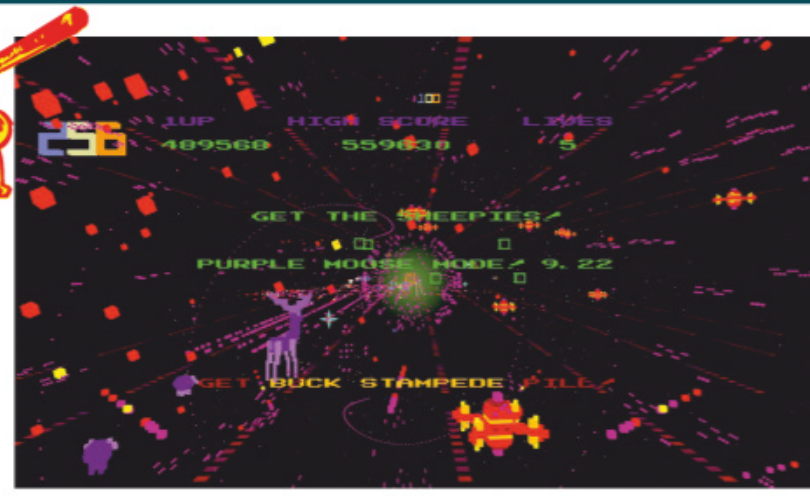
Jeff Minter's latest psychedelic shooter has snuck onto Steam, and it's every bit as good as you'd expect from the shoot-'em-up maestro who has been honing his craft since the early Eighties. *Moose Life* offers numerous ungulates, trippy visuals, a pulsing soundtrack you can almost feel and tight, precise controls that enable you to simply focus on destroying as many enemies as possible. It's also absolutely brilliant.

Mechanically, *Moose Life* is suitably different to recent Llamasoft shooters, such as *Tempest 4000* and *Polybius,* and is a great counterargument to the claims that all the two-man studio focuses on is subtle variations of the same Atari classics. *Moose Life*, like many Llamasoft titles appears to be an extremely simple game on its retrowave surface, but the longer you play, the deeper you realise it is. Each level in *Moose Life* contains a set amount of enemies and you can't progress until you've defeated them all. What's neat here, though, is that you can move forwards and backwards through each looped stage, effectively meaning you can play *Moose Life* at your own speed.

Another neat touch is jumping. Granted, it's nothing new in Llamasoft games, but here it lets you cling to ceilings so you can deal with enemies that are literally on another level to you. Needless to say, as *Moose Life*'s stages intensify, you'll find yourself frantically hopping from ceiling to floor and back again as you weave past bullets and try and grab each power-up that comes your way. You'll want to grab those little pills, too, as they offer all sorts of useful bonuses, including rapid fire, handy drones and even the ability to turn enemies into harmless deer. They stack, too, meaning things get crazy, very quickly.

Moose Life is fast, frantic and full of fun (we love the sampled shouts of 'excellent' when you set a high score). It's arguably the best Llamasoft shooter we've played for ages, and when you consider the competition that's high praise indeed.

» Score **94%**



»[PC] Collecting sheep makes you invulnerable for a limited amount of time. Get them to the end of the stage without dying and you'll earn a hefty bonus.

»[PC] *Moose Life* does include a VR option, although we were unable to test it. We'd imagine it's just as immersive as the one in *Polybius*.

The Games That Weren't

» Buy it from: bitmapbooks.co.uk **» Buy it for:** £29.99

Frank Gasking has been doing the gaming world a tremendous service by documenting unreleased C64 games, but he's truly outdone himself here. *The Games That Weren't* is a simply tremendous read that not only gives fascinating insight into why the featured games disappeared in the first place, but also shows what could have become of many of the projects, thanks to excellent interview material and useful screenshots and documents. Starting with *Blackjack* in 1975 and finishing with the 2015 C64 project *Spooky*, *TGTW* covers decades of projects and systems and it's packed with wonderful anecdotes. Fans of Japanese gaming will be disappointed, as it has a distinctly western focus but that doesn't stop it from being an essential addition to your bookcase.

The King Of Fighters R-2

» System: Switch
» Buy it from: Online **» Buy it for:** £7.19

Back in 1999, this Neo Geo Pocket Color game was one of the best handheld fighters on the market. While times have moved on, the cute, expressive sprites and perfectly implemented control scheme ensure that it's still a joy to play. The game is essentially a demake of *The King Of Fighters 98*, with techniques intact but fewer characters to choose from. What makes it worth picking up is the 'Making' mode, where you can customise your character with extra skills. The only downer is that without the Dreamcast link mode, some of those skills are unobtainable – though given how rarely used the original link cable was, most players would hardly notice.

» Score **78%**

Amiga Power: The Album With Attitude

» Buy it from: www.010101-music.nl **» Buy it for:** €32

Matthew Smith's Kickstarter project is finally with us and it does *Amiga Power* proud. The highlight is easily the huge number of remixed tunes taken from 35 games associated with the magazine. There are no duffers amongst them and the double CD does a great job of highlighting the Amiga's musical diversity. Equally good is the booklet, which not only delves into *Amiga Power*'s history but also has articles on each featured track with insight from the composers or past members of the *AP* team, including Stuart Campbell, Linda Barker, Cam Winstanley, Matt Bielby and many others. The result is a lovely tribute to the mag and a celebration of some of the best tunes to ever emit from Commodore's machine.

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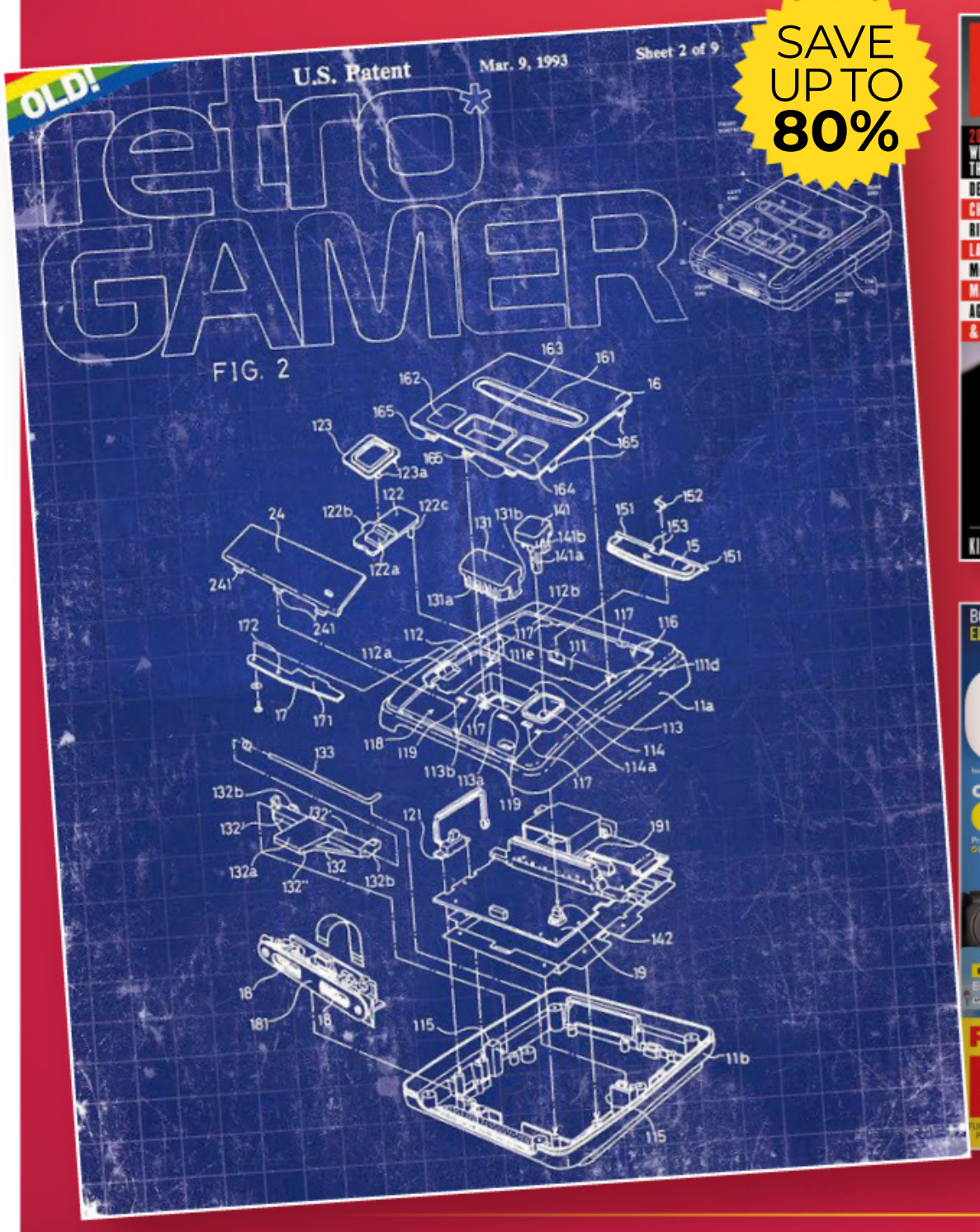

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COLLECTOR'S CORNER

READERS TAKE US THROUGH **THE RETRO KEYHOLE**

SUPER MARIO BROS 3

"This is my favourite game, so I had to get a signed copy by Shigeru Miyamoto. It's now priceless."

PAID: NOTHING

FOX MCCLOUD PROTOTYPE

"I really can't remember what I paid for this rare prototype, but it's now worth around $5,000!"

PAID: CAN'T REMEMBER!

A REAL RECORD BREAKER

Brett Martin shares his world-beating collection with us

This month's gaming superfan is an unusual addition to Collector's Corner, because while Brett does collect videogames, he's also managed to amass the world's biggest hoard of gaming memorabilia. Brett is one of the inspirational gamers that features in a new series of gaming videos called *Totally Game* (you can watch them all at bit.ly/totallygame) so it seemed like the perfect opportunity to feature him in the magazine.

Many gamers from the UK would hungrily pore over the latest Argos catalogue in the hope of circling a game or system for their birthday or Christmas present. While Brett didn't have access to Argos in the United States, he too became enamoured with catalogues from an early age. "There was a *World Of Nintendo* catalogue that came with a *Nintendo Power* in 1989 that I used to drool over," he tells us. "I now have most of the stuff in there today." A quick look at the images on display here highlight that Brett clearly has a great love for Nintendo, and the likes of Mario, Link and Donkey Kong make up a significant part of his collection. "Nintendo has the best properties," Brett tells us when we ask why there's such a big focus on the Kyoto-based giant's characters and franchises.

"The biggest collection of non-Nintendo items I have is my *Mega Man* collection", Brett reveals. He's a big fan of the Blue Bomber's games, telling us that, "I think I have every major game. I bought each one when it came out for the most part. I only had to backtrack for a couple and it was before things got crazy." The figures are equally collectible and Brett went after them with laser-like precision. "Once I found out there were figures I had to have them," he continues. "I bought several of the Bandai sets before I had a really sizeable collection."

Brett's love of memorabilia has led to him appearing in the *Guinness Book Of World Records*. Interestingly, he didn't make the first move. "Uncharacteristically, they contacted me looking to promote their gamer's edition with an eye-catching record," he reveals to us. "They found my collection, visited me and did a visual count and then took photos and did an interview." Guinness counted an astonishing 8,030 items, but Brett has since surpassed that and now believes to have around 20,000 items. Needless to say, space is a premium for Brett but he's also had to change how he sources his items. "It's less eBay now and more private collectors and Yahoo Japan Auctions," he tells us.

Even with such an impressive collection, there are still items that Brett hopes to acquire some day, and as you'd expect, they're rather rare. "The quickest that comes to mind is the Mekabon figure from the Japan-only *Super Mario Land* finger puppet set. He was the 'Chase' or secret figure that shows up far less than the rest of the set." Rare items typically demand high prices, so Brett keeps that in mind when seeking out new additions to his collection. "I have a number I'm comfortable with when hunting specific items," he concludes. "These days I'm often astonished at how much people want for items, but the hobby has attracted more and more people, and more generations are getting disposable income that they spend on stuff they love. Can't blame them!"

BIO

NAME:
Brett Martin

LOCATION:
Colorado, United States

FAVOURITE GAME:
Super Mario Bros 3

FAVOURITE SYSTEM:
SNES

COLLECTION WORTH:
$250,000

YOUTUBE:
nightram56

OCARINA OF TIME SET

"This delightful painted figure set was a sizable investment, but is now worth thousands."

PAID: £200

Got an impressive collection of your own? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

MARIO OSCAR STATUE

"This was another great item and was an employee award that was sculpted by the guy who did the Oscar statues. I was able to buy it at a reasonable price and it has now risen in value."

PAID: $200

JEWEL IN THE CROWN

FOUR-FOOT MARIO STATUE

"This gigantic statue is a great centrepiece for my room. It certainly wasn't cheap, but it's such a great talking point."

PAID: $700

BARGAIN HUNT

Your guide to the rising world of retro prices

THE COVER STAR

As you'd expect, prices for the Super Nintendo vary depending on what you want. A PAL or Japanese system typically starts from **£40** unboxed, while similar US machines have been selling for around the **£90** mark. Systems bundled with games or in mint boxes can end up in the **high hundreds**.

BURNING RANGERS

Want to relive this month's classic moments? You'll need deep pockets. The PAL version ranges from **£75** to **£196**, while a US copy fetches between **£300** and **£513**! The Japanese version is cheaper at **£25+** but does have a language barrier.

ROCKET KNIGHT ADVENTURES

This epic Konami game isn't massively expensive. PAL carts start at **£15**, while complete versions hit **£40**. The US version sells for **£50+** complete, while the Japanese version hits highs of **£115**.

KNIGHT TYME

Every version of David Jones' 8-bit sci-fi sequel is nice and cheap and won't cost more than a **fiver**. The Spectrum version has the most range with prices starting at **£1.20** and rising from there.

METROID FUSION

Nintendo's original GBA adventure is all over the place in terms of prices. Carts range from **£10** to **£40**, while complete boxed copies start at **£22**. The US and Japanese versions are even pricier.

SCREAMER

If you weren't put off by the compatibility issues Darran faced, you can pick up a PC jewel case copy for no more than **£2**. The big box edition regularly hits a **tenner**.

LURE OF THE TEMPTRESS

Atari ST copies start at a **quid** and top out at **£15**, while the Amiga version ranges from **£5** to **£20**. The PC outing is costlier, selling between **£10** and **£75**.

HOW MUCH?!

CONTRA

Sealed NES games continue to sell for absurd amounts and *Contra* is the latest example. 27 avid collectors pushed the starting price of **$49.99** to an eye-watering **$20,001**!

Prices correct at time of print

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!

Every month, one lucky writer-in will receive a spanking copy of either our NES/Master System or SNES/Mega Drive books

STAR LETTER

COLLECTION BUILDER

Dear **Retro Gamer,**
I just wanted to write in to say how much I've been enjoying the 'So You Want To Collect…' series. I was chatting about it with a few friends and it made for some interesting discussions that I thought I'd pass on. My mate, Michael, is an avid collector and he feels it drives up prices, making it harder for him to buy the games he wants. My friend Stewart and myself feel the complete opposite, as we're not serious collectors and it's now given us both great insight into how we should consider building our collections going forward and what games to target.

It would be wonderful if you could have more price guides through the magazine, even if it's a simple 'expect to pay X' for each mentioned game, as I've often wanted to purchase a game after reading about it in your magazine and was then horrified by the attached price. Is this something you'd consider going forward? I'd also like to see more focus on collecting games in general, particularly the dangers of collecting, as some of the collectors I've met in the past appear to be consumed by their collecting, and that can't be good for anyone. Keep up the great work and I'd love to see pictures of the team's collections some time.
James Baker

We're glad you're enjoying the feature, James, it does seem to be going down well with readers. You raise a good point with regards to the serious aspects of collecting, and it's certainly something we'd like to investigate. Hopefully this bookazine you've won won't cost you too much money!

» Here's an image from Darran's collection, last featured in issue 200. He's moved onto N64 and PlayStation now.

MEGA NEWS

Hi **Retro Gamer** team,
How do you feel about the current news on the Mega Drive scene? It's been a very exciting year so far, from the official release of *Aladdin Final Cut*, to fan projects such as *Street Fighter II Remastered*. We also had a remastered version of *Prince Of Persia 2: The Shadow And The Flame*, and the port of *Shinobi*, coded from the ground up to run on the Genesis with full arcade fidelity. I really want to use this letter as a way to say thanks to all the dedicated fans working on these and many other projects.
Leo Bandeira

We agree with you, Leo. The Mega Drive scene appears to be booming at the moment, with all sorts of exciting projects appearing. In fact, there's been so many recently, that we may have to point resident MD expert Nick at them and see if he can put an article together.

TIME TO STOP?

Hi **Retro Gamer,**
These are strange times. Coronavirus is everywhere and gaming is not what it used to be. Let me explain…

My wife was gone for a week so I thought 'nonstop retro game time!' I had everything with me – my original C64, all the PlayStations, WinUAE, CCS64, DOSBox, Switch, RetroPi, Antstream, and old and new computer magazines. And *so* many games. I wanted to try everything but in the end I only played a few through, really. The rest did not work for me. Was this a game overload? Are some games just not for me? Am I just bad at games? Should I just stick with the games I really like? And not play games because everyone tells you to play them?

Could you tell me? I sometimes feel embarrassed that I actually have nothing with Sonic, Mario or Alex Kidd, but I prefer bad and obscure games that I just knew as a child.

Keep up the good work! The picture shows part of my retro gaming preparations.
Best regards,
Mark Alphenaar

» Mark certainly has great taste in games, as well as magazines.

You're not doing anything wrong, Mark, and you're not the only reader who has mentioned being in a bit of a funk with classic games at the moment. Worry not, as we recon it'll pass. As for not liking Sonic, Mario or Alex Kidd? Who cares? Enjoy the games you do like playing, as that's what really matters.

SEAL OF APPROVAL

Dear **Retro Gamer,**
I just wanted to pass on my congratulations to the team who have been putting your brilliant magazine together. I've always enjoyed your work – the Eighties interviews and the recent *Pac-Man* and *Alex Kidd* articles were stand-out examples.

» [Master System] Issue 209's *Alex Kidd* article went down well with Stephen and plenty of other readers.

» [Mega Drive] You can find lots of information about *Prince Of Persia 2* on Mega Drive by visiting popuw.com.

CONTACT US

Snail Mail: Retro Gamer, Future Publishing, Quay House, The Ambury, Bath, Somerset, BA1 1UA

Email: retrogamer@futurenet.com

As a former games magazine writer myself (*Sega Pro* and *Play*, amongst others, showing my age now), I know how tough it could be when deadline was approaching. How you all came up with the same quality whilst working from home, I'll never know!

So, from one old-school gaming fan, a big well done to you for keeping the spirit alive for us all during these last few months. Long may it continue.

Best wishes,

Stephen Hardy

Thanks Stephen, that's awfully nice of you to say. It's letters like this that keep us going, so thanks for taking the time to write in and we're glad you're enjoying what we do.

ARX SPECIFIC

Hello Darran,

Sorry for the specific question, but I was wondering if **Retro Gamer** magazine has ever covered the RPG *Arx Fatalis* from 2002?

Thank you,

Michel Mohr

You'll be delighted to hear that we went behind the scenes of *Arx Fatalis* in issue 180.

» [PC] *Arx Fatalis* has plenty of fans, including Michel. Read about it in issue 180.

MONSTER MASTERY

Dear **Retro Gamer,**

I really enjoyed Alan Wen's article about the original *Monster Hunter* for Sony's PlayStation 2. I've always had a soft spot for the game, despite the original being a little rough around the edges and it always impresses me that Capcom was able to turn it into the world-conquering franchise it is today. With that in mind, I was hoping you could perhaps ask Alan to dig a little deeper into the series and cover the entire series, from the breakout success of the PSP games in Japan, to the sensational slash-a-thon that is *Monster Hunter World: Iceborne*.

Thanks in advance,

Marcus Turner

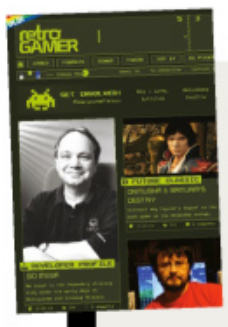
Cheers, Marcus! We're big fans of the series, too – especially Daz and Drew – so expect to see more monsters in a future issue.

» [PS4] Marcus wants to see more *Monster Hunter* love in the mag. How do you feel?

DISCUSSED THIS MONTH

Lego NES

Resident Lego nut Darran couldn't wait for the release of Lego's new tribute to the Nintendo Entertainment System and added it to his birthday list. After being given a firm, 'No, you're not having that, you're not a child,' from his wife, Melanie, he went ahead and ordered it anyway. The rest of the team is now wondering what happens next: will Darran get to build it before Mel finds out and when she does, how many pieces will she be able to break it into?



Your say

Every month, Retro Gamer asks a question on social media and prints the best replies. This month we wanted to know…

This month we wanted to know what your favourite SNES games are…

» [SNES] *Super Castlevania IV* is popular with readers and rightly so.

Adam Jones
The Chaos Engine. A cracking port of one of the best Bitmap Bros games of all time.

Curtis Richardson
Super Castlevania IV. Amazing gameplay, boss battles and out-of-this world music.

Steve R. Jones
Super Mario World. It showed me what game design could be. Still charming and challenging to this day.

Michael Braunton
Super Mario World is the obvious one. But my slightly-less-obvious choice is *Super Castlevania IV*. Amazing game, great level design and an absolutely banging soundtrack!

Martin K Dodd
Kirbys Dream Course. Simply the best crazy golf game I've ever played. Funky music, cute visuals – what's not to love?

Michael Bell
F-Zero for me. I was so impressed with the scaling and rotation in that game since we hadn't seen that in a home console yet. Or at least *I* hadn't.

Simon Butler
Super Metroid. For me it's as close to perfection as I have seen to date. It set a benchmark few titles have reached since.

AB Lipkin
Mega Man X. Perfect controls, great graphics and music.

Claus Seidelin
The Secret Of Mana: lush graphics, memorable soundtrack and three-player co-op gameplay.

Orange Caution
The Legend Of Zelda: A Link To The Past – it was the first game to wow me in terms of scale and scope. The dungeons were just right in terms of complexity, the music is sublime and it instilled wonderment from start to end.

Simon Morgan
Donkey Kong Country. It has cutting-edge visuals and one of the best game soundtracks of all time.

Rob Orchard
A Link To The Past is an obvious one (my daughter's middle name is Zelda), and *Addams Family Values* is a real hidden gem

Tony White
Legend Of The Mystical Ninja – I saw the Super Famicom import reviewed in early *Mean Machines*. It looked so cool. I'd never seen anything like it.

retro GAMER

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ENDGAME

WWF WRESTLEMANIA

» If there's one thing that wrestling fans love, it's fantasy booking. What would have happened if Goldberg and Sting had led the WCW invasion? What if Stone Cold hadn't turned down the Hulk Hogan match? How would Finn Balor's run as Universal Champion played out if he hadn't been injured? So let's skip to the end of WWF WrestleMania and find out what Midway thought championship gold would do for Razor Ramon...

01

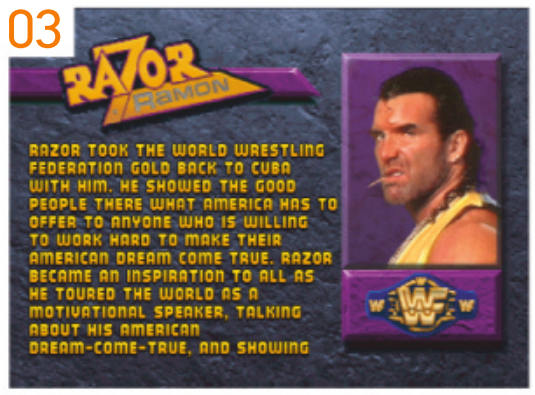
FREE PLAY
CONGRATULATIONS!!!
YOU ARE THE NEW WWF WORLD CHAMPION!
YOUR NAME WILL LIVE FOREVER AMONG THE GREATEST WRESTLERS OF ALL TIME!!!
...THANK YOU FOR PLAYING...

» That's a fair thing to say, many of the greatest wrestlers of all time have held what is now the WWE Championship. Then again, so have Jinder Mahal, John 'Bradshaw' Layfield and Alberto Del Rio, so it's no guarantee of quality.

02

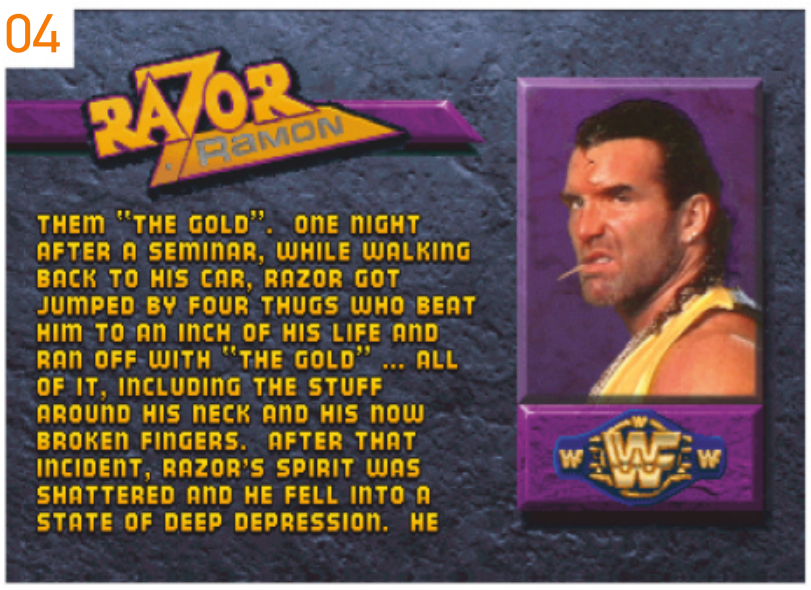
» So here we see the thing that never was – a Razor Ramon world title victory. Though he was the first person to capture the WWF Intercontinental Championship four times, he never won the biggest prize in the singles competition.

03


RAZOR RAMON
RAZOR TOOK THE WORLD WRESTLING FEDERATION GOLD BACK TO CUBA WITH HIM. HE SHOWED THE GOOD PEOPLE THERE WHAT AMERICA HAS TO OFFER TO ANYONE WHO IS WILLING TO WORK HARD TO MAKE THEIR AMERICAN DREAM COME TRUE. RAZOR BECAME AN INSPIRATION TO ALL AS HE TOURED THE WORLD AS A MOTIVATIONAL SPEAKER, TALKING ABOUT HIS AMERICAN DREAM-COME-TRUE, AND SHOWING

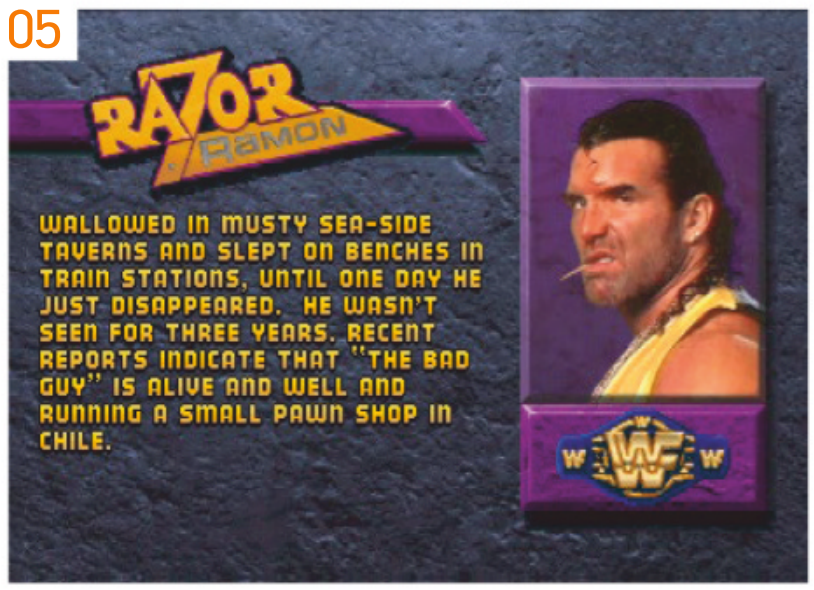
» After winning our fantasy title, Razor Ramon went back to his 'home country' of Cuba (he's from Maryland) and became a motivational speaker. In reality, Scott Hall departed for WCW in 1996 and became an even bigger star.

04


RAZOR RAMON
THEM "THE GOLD". ONE NIGHT AFTER A SEMINAR, WHILE WALKING BACK TO HIS CAR, RAZOR GOT JUMPED BY FOUR THUGS WHO BEAT HIM TO AN INCH OF HIS LIFE AND RAN OFF WITH "THE GOLD" ... ALL OF IT, INCLUDING THE STUFF AROUND HIS NECK AND HIS NOW BROKEN FINGERS. AFTER THAT INCIDENT, RAZOR'S SPIRIT WAS SHATTERED AND HE FELL INTO A STATE OF DEEP DEPRESSION. HE

» But misfortune strikes our alternate-reality Razor Ramon, who has all of his gold stolen. The reality is rather more sad – Scott Hall won various singles and tag-team championships in WCW, but struggled with alcoholism and never managed to capture that company's world championship, either.

05


RAZOR RAMON
WALLOWED IN MUSTY SEA-SIDE TAVERNS AND SLEPT ON BENCHES IN TRAIN STATIONS, UNTIL ONE DAY HE JUST DISAPPEARED. HE WASN'T SEEN FOR THREE YEARS. RECENT REPORTS INDICATE THAT "THE BAD GUY" IS ALIVE AND WELL AND RUNNING A SMALL PAWN SHOP IN CHILE.

» In fiction, Razor eventually finds peace as a pawn shop owner in Cuba. In reality, Scott Hall has been aided by fellow WCW alumnus Diamond Dallas Page, who helped him towards sobriety, though the occasional relapse has occurred. Who needs the fiction? The real-life story is far more interesting.

COVID

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